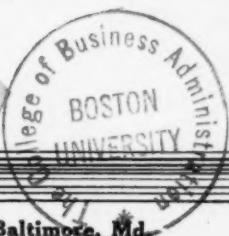


Manufacturers Record

Exponent of America



\$6.50 per Year.
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Baltimore, Md.
NOVEMBER 10, 1927

Shifting the World's Industrial Center to the South.

In the proposed establishment of a \$20,000,000 steam-electric plant in Alabama by the Alabama Power Company, and the letting of initial contracts of construction and steel work for the \$7,000,000 plant of the American Glanzstoff Corporation, near Elizabethton, Tenn., for the manufacture of rayon--the company having in view an ultimate expenditure of \$50,000,000 and the employment of 20,000 people in that industry--in the statement published in this issue that the Saluda River hydro-electric development, now under way, will cost \$24,000,000, and with many other enterprises representing millions of dollars in individual cases and many millions in the aggregate as reported today, it is readily seen that there is a sweep of development work in the South of such stupendous importance as to demand and command nation-wide attention.

One fact of significant importance in these new enterprises is that they are free from speculative land operations and free from any spirit of boom enterprises; they are legitimate undertakings backed by great capitalists who recognize the South as the coming center of industrial progress and prosperity for America, and that means for the world.

The story of this tremendous sweep of investment capital into the South, and the huge sums put by the South into its own industries, is like a mighty panorama, unfolding before the eyes of the nation the greatest material advance ever shown by any section of the United States. And yet we are evidently only at the very beginning of this movement. No limit can be put upon the progress of the South during the next five or ten years. It is safe, however, to say that it will be so great that it will amaze the world.

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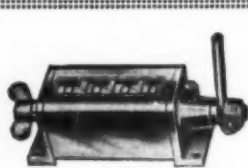
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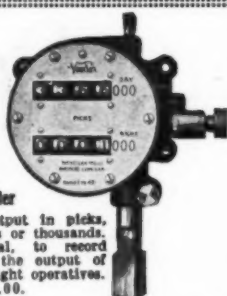
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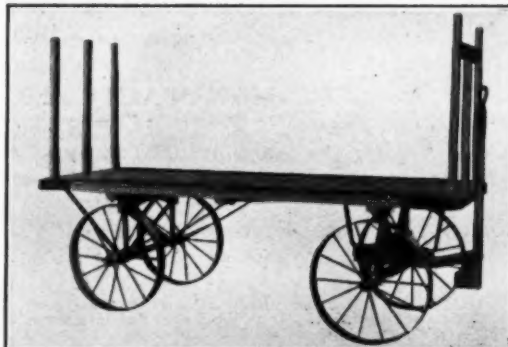
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Weekly. }

BALTIMORE, NOVEMBER 10, 1927.

{ Single Copies, 20 Cents.
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Gigantic Plans for Electric Power Development by Steam and Water.

A \$20,000,000 steam-electric plant, the first unit of which is to cost \$5,000,000, is to be built in Alabama by the Alabama Power Company, work to begin as soon as the Public Service Commission grants the right. The ultimate capacity is to be 200,000 kilowatts, or 270,000 horsepower. Such, in brief, is a statement wired this paper from Birmingham by President Martin of the Alabama Power Company.

W. S. Barstow, president of the General Gas and Electric Corporation and the Lexington Water Power Company, the two companies which are developing the hydro-electric plant in South Carolina on the Saluda River, after a visit to that location writes the MANUFACTURERS RECORD that this investment will represent a total cost of about \$24,000,000. As some of our readers know, it is said the dam will be the world's largest earth dam, containing 11,000,000 cubic yards. President Barstow looks forward to a great industrial growth of that entire section and of South Carolina upon the completion of this development, and reports that the industrial development division of his company already has a large number of inquiries from industries at various points in the North seeking further information as to the progress of this work, with a view to changing their locations to the South, and some of them he expects will settle in the Saluda River territory.

These are magnificent tributes to the inherent strength of the industrial interests of those regions tributary to the operations of these companies and of all the hydro-electric companies with which the Alabama company is connected in the superpower system. It is but a further illustration, many of which are being given every day, of the tremendous sweep of the industrial movement under way throughout the South. Wherever an electric power plant is established, whether it be on a watercourse or by the use of steam, there is immediately created a strong factor which must find its largest prosperity through active work in creating new industries to consume its power.

The electric power companies of the entire South, from Maryland and West Virginia to Texas, are among the great forces active in seeing that industries are created as rapidly as possible in order to increase the demand for electric power. These forces at work in every part of the South, are not only by wide publicity throughout the North and West creating an increased interest on the part of people of those sections in the South, or for the removal of their old established plants to the South; they are at the same time stimulating a local demand for creative work. They are developing a spirit of co-operation and enthusiasm for industries. They are helping to bring about a decentralization of industrial activities,

making it possible for the villages and small towns of the South to establish new plants, utilizing electric power in a way which makes feasible this decentralization to the great advantage of industrial and agricultural life alike.

Every successful industrial enterprise established in the smaller communities of the South not only creates a market for the farm products of the surrounding country, but at the same time creates a market for the brains and the manual labor of the men and women products of these farms.

It was an interesting story we told a few weeks ago about the employment in industries in the little town of Geneva, Ala., of college and high-school graduates from farms in the surrounding country, where these employees were earning more than they had ever earned in any previous work, even in school teaching; and some of these individual workers from the farms were making more than their fathers were making on the farms. A development of this kind is such an unmixed blessing to every town in which these industries are established that it is difficult to overstate their importance. In towns lacking such industrial enterprises there is always a dearth of employment. The young people have to go to other communities in order to find an opportunity to make a living, and the young people from the surrounding farms instead of finding employment near at home move to other sections to the disadvantage of their native State. The South has been exporting entirely too large a proportion of its young people, men and women of brains and of energy and of initiative. If it could be counted in dollars and cents, the loss would run far into the billions.

These young people have gone out of the South because of the lack of opportunities in the sections where industrial development had not created a home market for educated young people. These hydro or steam electric companies are, therefore, benefactors of the South to an extent that it is difficult to estimate. They are creative, stimulating factors in any community in which they are located.

It might be said by some critics that their work is selfish, through the desire to enlarge their own operations. But viewed from that standpoint what business is not selfish? But this is a selfishness wholly justified by the highest ethics. Every business concern viewed thus is selfish because it is seeking constantly to expand its business and increase its profits. Without such a stimulation there would be no increase in business, and individuals and communities and nations would stagnate and die.

These electric power companies, therefore, are carrying on a very high order of material advancement, and without material advancement and prosperity there would be no

money with which to maintain schools and churches. Education and religion alike must fundamentally rest for their expansion on the prosperity of individuals and of communities.

Representing investments running far into the hundreds of millions of dollars, these electric power companies have an opportunity still further to broaden their publicity work and still more rapidly to hasten the day when, through the establishment of new industries, the market for power has increased so greatly as to test the expansive resources of all the activities of these big organizations.

There is still another phase connected with the establishment by the Alabama Power Company of its great steam-electric plant in that it will bring to the front an active discussion of the wisdom of establishing steam electric power plants in many sections where water-power is not available. In this case it is particularly interesting to know that the new steam plant of the Alabama company will be close by its Gorgas steam plant, and thus close to Muscle Shoals.

THE NEW ENGLAND DISASTER.

TO New England in its great loss of life and property through its disastrous floods, the heart of the nation goes out in deepest sympathy. It has now learned by sad experience the horror of rushing waters, overflowing rivers, broken dams and continued downpour day after day. To all of this is now added bitterly cold weather, intensifying the suffering of the people.

But New England grit will meet this disaster as it has met every other emergency, and with undaunted courage repair the damage done to physical properties, and do everything humanly possible to relieve the anguish of those who have lost loved ones.

The South out of its own sufferings in times past will extend to New England its heartfelt sympathy and love.

PROPOSED REPORT OF BUSINESS MEN'S COMMISSION ON AGRICULTURE.

THE Business Men's Commission on Agriculture, which for a year has been making an investigation of the agricultural situation and has been studying the farm economic problem with a view to proposing remedial measures, has completed its report and will make public a statement of its findings and recommendations on November 13 through its chairman, Charles Nagel.

The report will contain, besides an analysis of the agricultural situation as a national problem, a discussion of legislative proposals of the McNary-Haugen and of other types, of the relation of the protective tariff system to the agricultural problem and of various other proposed or possible Governmental lines of action relating to agricultural relief.

The Commission is finishing its work just about a year after being called into existence by the National Industrial Conference Board and the Chamber of Commerce of the United States for the purpose of outlining a constructive national agricultural policy in harmony with sound economic development in the United States. At the conclusion of a series of hearings in various sections of the country at which approximately 200 witnesses representing the different major occupational groups, including many active farmers, were examined, Chairman Nagel in a statement declares that "a general agricultural depression" has been found to exist calling "for consideration as a national economic problem."

THIS RAILROAD WENT AFTER BUSINESS.

INTEREST out of all proportion to the size of the railroad involved was developed by a report of the Detroit, Toledo & Ironton showing a net operating deficit of \$44,044 for July, against a net operating income of \$140,548 in July, 1926, the magnitude of the interest being due to the fact that the road is owned by Henry Ford and had been described by him on its acquisition as a potential income-earning property. The consensus of opinion appears to be that "even Mr. Ford cannot produce railroad earnings when business is not available," as the New York Herald Tribune expressed it.

When taken over by Mr. Ford, the Detroit, Toledo & Ironton was not one of the affluent, or even one of the most promising, railroad properties in the land. But, said Mr. Ford, in effect, there was no reason why it should not be both. So, he threw to it enormous business in connection with his automobile industry and in time the D. T. & I. emerged from the red ink balance class. Later, production in Mr. Ford's automobile plants shrank and in some instances ceased altogether, and the business of his railroad reflected this slump.

But, as more thoughtful railroad men may see it, effort should not cease at the line drawn by the dictum, "a railroad cannot produce earnings when business is not available." The axiom should be a stimulant, rather than a deterrent. Such railroads must go after new business.

An especially interesting instance of a railroad going after business to make up for tremendous shrinkage in the specialty it had been handling—even as Ford had specialized in the handling of his automobile materials—may be cited in the case of the Gulf, Mobile & Northern, which a few years ago found itself in a rather serious position.

For years, the Gulf, Mobile & Northern had thrived—had, virtually, existed—on the lumber industry in Mississippi, and when that industry began to shrink in volume the railroad faced mighty lean prospects. Instead of folding up, however, the road decided to cultivate other, new business, to replace the loss of the lumber freight income, and the ingenuity of its plan may seem to "practical" railroad men so fantastic that its success may be regarded by them as a fairy tale.

As explained in "The Railway Age," the idea for developing new business "had its birth in the cab of a freight locomotive," although its details were worked out in the office. In discussing ways and means, an official and this freight engineer evolved the plan of sending personal letters from some member of a freight train crew to shippers and consignees represented in their loads. "Members of the freight train crews, on each run, write letters to the shippers and consignees of every shipment on the train, advising them of the fact that the train is carrying their shipment and giving them passing and delivery records," as "The Railway Age" details it. Also, "in addition, the letters contain a short sales talk on the advisability of routing shipments via G. M. & N."

At first, such letters were typed in the caboose, but as the idea developed in practice and in results the epistles were prepared at division points and given to the train crews for signature. Each letterhead is illustrated with a picture of the train, giving the names of each member of the crew, thus adding a personal touch, always tremendously effective.

A typical letter from an engineer reads as follows:

"I am 'on time' with Gulf, Mobile & Northern manifest freight No. 51, en route between Jackson, Tenn., and Louisville, Miss., a distance of 188 miles, which we make in 10 hours actual running time.

"I have in my train today car IC 45716, flour, shipped from you at Minneapolis, October 14, destined ABC Exporters, Mobile, Ala. Right now, we are approaching the Tennessee-Mississippi State line at 30 miles per hour. Your car is moving nicely and should be at boatside, Mobile, early on the morning of the 22d.

"Above, I am shown in the cab of my regular assigned

engine, as the world sees me. Below, is my view of the passing world while on duty moving the Nation's commerce. When you consider that there isn't a pound of freight that moves via rail but what the first impulse of movement is conceived in the brain of a locomotive engineer, you will be glad to know that the engineers on this railroad make an earnest effort to move your business quickly and carefully."

Equally engaging is a letter from a conductor, like this:

"The above picture will give you some idea of my 'place' of business over a 188-mile district on trains Nos. 55 and 56, between Jackson, Tenn., and Louisville, Miss., with the second largest decapod type locomotive in the United State. My office is the little red caboose coupled to the rear of the train. This picture was taken one mile south of Faulkner, Miss., while, as usual, we were right on time with No. 55.

"One of the cars in our train today, and we are still on time, is IC 341827, in which there is billed a shipment of two filing cases, billed by you from Chicago and consigned to the Soule Steam Feed Works, Meridian, Miss. This shipment was received at Jackson, Tenn., today and should arrive in Meridian tomorrow afternoon in time for early morning delivery the 20th.

"With 17 years of service with this company, I have noted many wonderful improvements, and I assure you that your business is handled carefully, quickly and safely while in our care. You will find our management fair, and as the interest of the management and employees is mutual, so is the appreciation of handling your business, be it large or small. I hope business is good with you."

"The replies received to these letters leave no doubt in the minds of the management that the plan is a success," says "The Railway Age." The replies "come in from every State by the hundreds and all of them are very cordial in tone." Shippers, large and small, "take time to write personal letters to crews, expressing pleasure."

For instance, the manager of a sewer pipe works at Birmingham, Ala., writes:

"The letter you have written us under date of the 2d is the first one of its kind we have received. Any conductor who is interested in shipments to the extent that you seem to be is entitled to a reward of more business. We will get more of our customers to route shipments your way."

The manager of an automobile company at Long Beach, Cal., wrote:

"We are extremely pleased to receive your letter of March 9, relative to our carload transported by your company. It will be a pleasure for us to use our influence to have future shipments routed via G., M. & N."

From the traffic manager of a grain company in Chicago:

"How do you do, Mr. Woodward? We are very pleased to meet you. If you evolved the novel advertising stunt as reflected by your communication, the stockholders of the G., M. & N. have no business retaining you in the capacity of a conductor; they should place you in charge of solicitation."

The purchasing agent of an irrigation association at Phoenix, Ariz., wrote:

"We wish to thank you for your report on B. & S. 6133 car electric transformers, which you recently hauled over your line; and wish to advise that we have instructed our traffic department to consider your company in further routing of freight shipments."

When the mountain would not go to Mahomet, Mahomet went to the mountain. When business did not stampede toward the Gulf, Mobile & Northern, it sought out business. The axiom, "A railroad cannot produce earnings when business is not available," is fallacious and misleading. There always is business available, in this great, productive land, and that it will respond readily and gladly to opportunities offered to it for efficient transportation is proved by the experience of the Gulf, Mobile & Northern. But, right here, it must be added that such loyalty and interest as is shown by the G., M. & N. men is a mighty big factor in the probability of success. And what applies to the business of this road is applicable to nearly all other lines of business. Somebody is always busy by adopting new methods as illustrated by the experience of this railroad.

TAX REDUCTION SHOULD GO THE LIMIT.

EVERY prediction made for some years by the Treasury Department as to the surplus income of the country has fallen far short of the reality. It was rather a surprise, therefore, that Secretary Mellon of the department should again risk the responsibility of making another bad break, and thus proposing a much smaller reduction in income taxation than is justified.

This generation is bearing too large a proportion of the debt incurred for the safety of future generations. Increased wealth of the country would make the payment of this debt 10 or 15 years hence very much easier than at present. The people of the country, that is, those who pay income taxes and the corporations, have been unduly pressed and crowded to the limit in income taxation, while millions who ought to be included in the income tax lists pay absolutely nothing. So far as the Government is concerned, they are paupers. They have been put in the pauper class, against which they ought to protest. They get the same protection to life and property as those who do pay income taxes, but they are the recipients of the bounty of the very small number who are forced to pay the heavy burden of taxation since Germany made war upon the world.

Every time a man has to pay an income tax bill he might naturally let his thoughts run to the crime committed by the Hohenzollerns when through the World War they forced upon the world a fearful cost in lives and treasure. But that is behind us. We must pay the tax, yet the tax ought to be equitable. It should include, at least so far as requiring a report is concerned, a statement from all men and women in the country who are in receipt of any income. They would then have a better appreciation of the burden that is placed upon corporations and others who pay this tax. They would also have a sense of patriotism that they were paying their share, however small, of this burden. Perhaps their interest in the management of the Government would thereby be increased.

President Coolidge and Mr. Mellon in seeking for a small reduction in taxation instead of a large one will probably be as badly defeated in that respect as in their former experience. The country demands a big reduction. Enough Congressmen probably will be in favor of it to pass a bill to that effect. Certainly such a bill ought to be passed. The tax on corporations should be severely reduced. Earned incomes in contrast with the tax on incomes from invested securities or property should be heavily reduced. The inheritance tax should as suggested by Mr. Mellon be wiped out. It is in every respect an unjust tax as it now stands.

Business is shackled by this income taxation. Cut these shackles loose and business would respond to such an extent as to make an increased income from taxation, necessitating further reduction of income taxation in the not distant future. A bill for heavy tax reduction should be introduced promptly when Congress meets and promptly passed.

EUROPEAN MOVES TOWARD DOMINATING WORLD TRADE.

UNDER the caption, "Drive to Lift Bans on Trusts is Foreseen," J. F. Essary, Washington correspondent of the Baltimore Sun, says that "a general, if not concerted, movement on the part of industrial interests to break down in some degree the restrictions imposed by the Federal Anti-Trust law is indicated by a series of developments and public utterances within the last few days." In only one of the five "developments" which he cites, however, has there been any hint of action; the other four are "warnings" and "suggestions."

In the meantime, foreign nations are acting and almost daily are perfecting industrial and economic combinations for effective, successful competition right in the United States with American interests. Foreign cement is sent into the United States for American road and structural construction. Foreign iron and steel are competing in the United States with American iron and steel. With American farmers seeking relief from unprosperous conditions—some even asking Government aid—and with Southern farmers seeking higher tariff rates on competitive products, a cargo of 1500 cases of canned tomatoes was received in Baltimore—a Southern city, by the way—in an American steamship, the "Liberty Land," on October 29.

Further, says a news article in the Journal of Commerce, on that same date: "The possibility of reopening Paris as an important market for foreign securities is increased by recent changes in the law adopted by the finance committee of the Chamber of Deputies, advices reaching Wall Street state." In other words, Europe counters promptly against the recent action of the New York Stock Exchange in listing foreign securities for trade on that board.

Also, on the same date, the New York Times printed a special, copyright cable from Paris:

"A further step toward making Paris the chemical center of the world occurred today, when the International Chemical Union, an organization fathered by France, met in convention here to create the greatest chemical library in existence.

"The convention followed soon after the fifth world chemical congress—where an announcement was made of the formation of a \$1,000,000,000 European chemical trust to compete for the world markets with America's chemical industry—and the laying of the cornerstone of the International Chemical House."

And, despite a protest to the American Department of State by the American Chemical Society against the United States Government having anything to do with "a veiled attempt to make Paris the controlling factor in scientific and commercial chemicals," America is down on the list of contributors for nearly 600,000 francs, says the New York Times cable.

Only two days later—with Sunday intervening—another newspaper, the United States Daily, announced the formation of another international syndicate, this "for the control of the world trade in margarine, according to advices received by the Department of Commerce from the Assistant American trade commissioner at London, James Somerville, Jr." This syndicate will acquire a controlling interest in both the Jurgens and Van den Bergh undertakings in all countries, and the statement of the Department of Commerce is quoted as follows:

"The two organizations whose future fortunes are thus linked together are, by all odds, the most important in the European margarine industry. The capital involved in this merger amounts to many millions of pounds. These firms carry on their industry on a large scale, not only in Holland and England, but also in Denmark, Belgium, Germany, France, Sweden, Norway and some of the countries of central Europe."

And on the precedents of steel, cement, canned tomatoes and many other commodities, it is at least reasonable to

expect that this combination will come into the United States in competition with the American industry.

And what actual, concrete defense has the United States erected? Omitting the movement for a protective tariff on vegetables started by farmers in Texas and Florida, Mr. Essary cites the following, here summarized: (1) A petition to the President by the chemical industry for some revision of the law against monopolies; (2) a decision by some petroleum industry leaders that "some combination" is necessary; (3) a "conviction" in textile circles that "most of the ills" in that industry are due to competition; (4) a "warning" by Charles M. Schwab of "the necessity for proper and economic distribution and selling" of American iron and steel products; (5) a "suggestion" from the Chamber of Commerce of the United States in favor of "the elimination of any tendency toward governmental paternalism or bureaucracy."

Unnecessary hobbles must be removed from American industry, not that it is to be permitted to run amuck as in the days when restrictive legislation became necessary for the protection of the consumer and of industry itself. The farmer as much as the operator in any other branch of productive industry needs the protection of a real, American tariff—that is, a tariff by America, of America, for America.

Foreign nations are stimulating their American invasion each day. The "warnings" and "suggestions" of American industry must be translated into action by Congress.

FLOOD CONTROL A FEDERAL RESPONSIBILITY.

AFTER a tour of the flood areas of Arkansas, Missouri and Louisiana, a committee from the Chamber of Commerce of the United States decided to make the following recommendations to the board of directors of that organization:

1. That the Federal Government should hereafter pay the entire cost of constructing and maintaining works necessary to control floods of the lower Mississippi River.
2. The Federal Government should assume the sole responsibility for locating, constructing and maintaining such works.
3. There should be an adequate appropriation to insure efficient, continuous and economic work, the funds to be made available as needed.
4. Flood control of the Mississippi River is a work of such magnitude and urgency that it should be dealt with in legislation and administration upon its own merits, separate and distinct from any other undertaking.

The recommendations were framed by Lewis E. Pierson, president of the American Exchange Irving Trust Company of New York; Robert M. Lamont, president of the American Steel Foundries of Chicago; Matthew S. Sloan, president of the Brooklyn Edison Company; John G. Lonsdale, president of the National Bank of Commerce of St. Louis; Professor Daniel W. Mead of the University of Wisconsin; William Butterworth of Moline, Ill.; Frederick A. Delano of Washington, D. C.; Arthur S. Brent of Los Angeles and Henry G. Bradlee of Boston.

TO BOTTLE FLORIDA CITRUS JUICE.

IMPETUS for the citrus industry of Florida is indicated in an announcement by W. J. Howey, developer of a 60,000-acre orange grove tract known as Howey-in-the-Hills, that bottled orange and grapefruit juice from that tract will be distributed in every market center in the country, from Maine to Denver, Col., during the present tourist season and from that time on. Under Mr. Howey and W. A. Kenmuir, manager, more than 500 men and women of the organization have perfected the system for such distribution.

"We are now taking leases in cities all over the country for distribution centers," said Mr. Howey. "We shall cover all of Florida by truck distribution and will ship in carload

lots to the distribution centers in other States. We now are prepared to begin in short time the distribution of orange juice and the juice of grapefruit in Florida and the cities of the Southeastern States."

As Mr. Howey sees it, "the problem for the successful future of the citrus industry in Florida is to eliminate about one-third of the crop from the boxed fruit that goes into the market—not because there is a surplus, by any means, but to work up the high standard of the Florida fruit that is necessary to maintain the integrity of the Florida brand."

The process, Mr. Howey adds, does not destroy the original flavor and value of the juices, and tests have shown that the juice will keep for at least three years, retaining vitamins A, B and C, so important in orange and grapefruit juice.

Possibilities for a great foreign market were indicated by Mr. Howey in a statement that last season he shipped a carload of oranges to England, with a simple statement that he could duplicate the sample for 10 years, and had received an order by cable for 100,000 boxes—too large an order to be filled at that time.

Arrangements have been made by Mr. Howey for special parties of visitors from New York, Philadelphia, Pittsburgh, New Castle and Allentown, Pa., Chicago and St. Louis, to take in St. Petersburg and Tampa and the groves at Howey-in-the-Hills.

ONE PHASE OF THE MEETING OF NATIONAL ASSOCIATION OF MANUFACTURERS.

OUT of the recent meeting of the National Association of Manufacturers in Chattanooga—the first time this great national business organization has met in the South for 30 years—will come much of value. It will give great impetus to Southern industry; for, a great gathering of this kind is bound to leave an imprint upon the visitors to the South and upon Southern people.

One of the benefits of value alike to the Association and the South was the great amount of publicity given to it by the press of this section. In itself, this publicity was of value to the Nation in creating new interest and quickening the industrial spirit now so pronouncedly manifest in the Southern States. Census figures show that the geographical center of industry for some years has been moving West and South, and with the progress being made it is safe to say that industry will move Southward at an even greater pace.

Especially were the Chattanooga papers alert to their responsibility to disseminate information about the National Association of Manufacturers and its activities, both before it convened in that city and during its sessions. They published columns on the proceedings of the meetings and in addition issued special sections of their papers covering the convention and telling of Chattanooga's advantages. The Chattanooga Times issued a special pictorial section and the Chattanooga News likewise issued a special section devoted entirely to the National Association of Manufacturers and the Chattanooga territory. In newspaper language, they "covered" the convention in a way that was a credit to themselves, to Chattanooga and to the South, and a fitting tribute to that great national organization representative of industrial America.

We hope the National Association of Manufacturers will not again wait so long before paying the South a visit. Its welcome will be even greater the next time; for, the coming of the country's manufacturers to the South has inspired a new determination for this section to do greater things in an industrial way and we hope that what the visitors to the Chattanooga convention have seen and heard will be an inspiration to them and awaken in them a keener realization of the South's industrial advancement and its opportunities.

THE EXTENT OF AMERICA'S MANGANESE POTENTIALITIES.

THE possibilities of the development of manganese in this country, so essential to its future welfare, as given in this issue by J. Carson Adkerson of Woodstock, Va., president of the American Manganese Producers Association, will doubtless prove a revelation to many people who have been laboring under the impression that our manganese deposits are inconsequential and that, therefore, we must put manganese on the free list and depend upon Russia and other countries for our supply.

Banking interests that have acquired large concessions of manganese in Russia are probably responsible for some of the propaganda being put out in this country against our manganese potentialities. It is possible also that some of the large manganese consumers have not fully appreciated the resources of the United States in this mineral and, therefore, are themselves joining in the campaign for free manganese and belittling the available supply in this country.

Sometimes it looks as though the United States Geological Survey is more interested in the internationalization of the mineral resources of the world, especially in this manganese situation, than in a full study of what America can do in the way of manganese production to meet our present and future needs. The internationalization of raw materials has become somewhat of a pet hobby of some of our supposed scientific men and geologists who have fallen into the trap laid by European authorities, who want to be able to call on this country for whatever supply of raw materials we have for their benefit, and to supply us, with profit to themselves, with whatever materials they think they can furnish, and in doing so prevent the development of these raw materials in America.

We have good illustrations of this in the fight that has been made to prevent the development of potash in America, and possibly some influence in that same way against nitrate fixation. Foreign interests have vigorously fought the development of our potash resources and, misled by this propaganda, Congress has failed in the past to give adequate protection to potash production which, unless Congress had been recreant to its duty, would by this time have been fully equal to American needs, relieving us of dependence upon foreign potash.

Such things as potash, nitrates, manganese and all other materials, the development of which would inure to the prosperity of the country in times of peace and to protect it in time of war against enforced shortages, should be regarded by Congress as of supreme importance in the rounding out of the utilization of our resources for our safety.

Thomas A. Edison, for instance, is busily trying to develop a supply of rubber, or to find a source of rubber which would make us independent in case of war, stating publicly that he expects some time to see Europe arrayed against this country in war and able, unless we develop our rubber supply, to cut off our rubber. Whether Mr. Edison is too much obsessed with this danger or not we cannot say, but we do feel quite sure that some day this country will have to face a gigantic world war, largely against us, a war which will tax to the utmost our resources in men and materials.

In connection with Mr. Adkerson's statement in regard to the manganese potentialities of the country, a letter to him from the Assistant Secretary of War, Hanford McNeider, expresses high appreciation of the importance of the work Mr. Adkerson is doing. Mr. McNeider writes:

"Your work in the development of an adequate supply of manganese ore to meet the industrial needs of the United States has been brought to my attention. Your activities

along this line are rendering valuable service in the solution of the problems of industrial preparedness, and I wish to express my appreciation of the work that you are doing.

"It appears that manganese is essential to the production of steel, and without steel national defense is obviously impossible. *The safety of the country requires that we have a readily available source of manganese within the United States.* (Italics ours.) Those who are working to meet this requirement have my best wishes for success."

If the United States Geological Survey and the State Surveys and the steelmakers of America would unite in an active campaign with the Manganese Producers Association to develop the manganese potentialities of this country, and heartily co-operate with these manganese people, great good for the protection of the country would be accomplished.

ANOTHER BIG MASSACHUSETTS MILL GOES SOUTH.

STOCKHOLDERS of the Appleton Company, operating a textile plant at Lowell, Mass., with approximately 113,500 spindles and 3600 looms, last week approved a plan to close its plant and to move 30,000 spindles and 850 looms together with the necessary preparatory machinery to the plant of the Appleton Manufacturing Company, Anderson, S. C., all of the stock of which is owned by the Appleton Company. At the same time an expenditure of \$780,000 was approved for moving the machinery to Anderson and for the erection of the necessary buildings. This action will leave the Appleton Company with its mill and other real estate at Lowell and approximately 75,000 spindles, which will be closed down for the present, and the company declares: "Their ultimate future will depend on the action of Lowell authorities in regard to taxation, and relief from handicapping legislation in Massachusetts."

The proposal for removing the machinery from Lowell to Anderson was brought to the attention of the stockholders by the board of directors, with a statement by the president of the company showing that operations at Lowell have shown losses totaling over \$2,000,000 for the three years ending October 30, 1926, and that "while the loss for the current year ending October 31, 1927, will be less unfavorable," it is pointed out that "prospects for the future are not encouraging." On the other hand, it is said that the 30,000 spindles and accompanying machinery at Anderson are running full time and at a profit.

Immediately following the action of the stockholders bids were received by J. E. Sirrine & Co., engineers, Greenville, and contracts were subsequently let for improvements to the present buildings at Anderson and for the necessary new buildings, and work will get under way promptly. Contracts will soon be let for 200 dwellings for additional operatives and an office building.

The MANUFACTURERS RECORD does not exult over the fact that so many Northern and Eastern textile plants and other industries are moving to the South, but it congratulates the operators of these plants, that as business ventures, they so fully appreciate the tremendous advantages the South offers them in the operation of their plants. Nor does it believe that the removal of these plants will prove a permanent detriment to the sections they leave, because these sections, with the enterprise they have shown in the past, should be able to so adjust their manufactures that another industry that can be profitably operated will replace each one lost. Unwise legislation and burdensome taxation are largely responsible for the movement of so many plants from Massachusetts, and in this fact the South should see the need of extreme caution in legislative work now and for all time to come that the utmost encouragement may be given to industrial interests.

NEW ENGLAND'S BUSINESS "TOWN MEETING."

EVIDENCE of the abiding vitality of New England and of its realization of the manifold opportunities open to it in the present and the future, as well as in past years, for development of industrial, commercial and agricultural lines, is to be noted in announcement that the third New England Conference will be held at Springfield, Mass., November 17 and 18. Between 2000 and 3000 participants are expected.

At the time of the creation of the Council of this organization, about two years ago, much was heard of "The New England Problem," and the Council at once determined, first, to ascertain the real meaning of that phrase, and, second, to devise a solution for that "problem." While this task still remains uncompleted, the Council already has learned great truths.

"The Council," says the program, "has discovered that there is no single New England problem the solution of which will instantly transform the New England States into an economic paradise or Utopia. The Council has learned, however, that there are many problems peculiar to and common to the New England States; that the 'New England Problem,' if such there be, is the age-old problem of maintaining in full effectiveness the creative and productive forces of a region which is the first section of the United States to experience industrial maturity."

A fine statement, showing that the Council, indeed, has gone far not only in its task, but also on the road toward constructive industrial, commercial and agricultural stimulation.

But, has New England reached the period of "industrial maturity?" Many persons in every corner of the land will entertain grave doubt that it has—indeed, with the intelligence and vigor of its people, many may doubt that it ever actually will reach to "industrial maturity." The South, for instance, does not expect ever to reach that limit; the West would be pained by such a thought; the idea does not seem quite in harmony with the intelligence and constructive activities of the Council. The present and oncoming generations will continue to keep New England ever young and ambitious for greater and still greater growth.

The practical intelligence of the New England business man is indicated in the definition of the annual conference as "New England's business parliament"—a "town meeting of the business organizations and interests of the six New England States, the temper, expressions and viewpoint of which must and will be accepted as those of New England business." The function of the Council is to give concrete expression to the ideas and purposes of the Conference. Ever alert for keen business suggestions, the South well may look to this organization as an example to be adopted.

"The renaissance of New England is an accomplished fact through the Conference—Maine is more and more awakening to the opportunities on every hand and desires to pledge its intimate interest in reminding the Nation that New England in very truth is the Land of the Rising Sun," says Governor Ralph Brewster of that State. And such, no doubt, is the real and loyal sentiment of every other New England Commonwealth.

Besides a review of the Council's work on the lines of agriculture, recreational resources, public relations, community development, research and power, the program provides for discussions of State problems and for various subsidiary conferences on these and other subjects. The program is characteristically businesslike.

And an idea of the practical nature of the Council and the Conference may be gained through imprints on the physically attractive program: "This Announcement Was Printed in New England," and, "This Paper Was Made in Springfield."

AN UNUSUALLY INTERESTING MAGAZINE IS THE INFANTRY JOURNAL FOR NOVEMBER.

THE Infantry Journal for November, published by the United States Infantry Association of Baltimore and Washington and printed by Fleet-McGinley, Inc., of Baltimore, is an extremely interesting magazine containing many articles invaluable to the layman as well as to the army man. In this issue there is the first of a series of articles on the "danger zones" of the world, in which are pointed out many of the danger spots in international affairs that might be productive of war. The article closes with the statement:

"We have completed our survey of the world's danger zones. In subsequent articles we shall follow developments and examine more in detail the zones in which the situations seem critical."

"In 'War: An Unmitigated Curse' are given in detail many of the startling facts in regard to the number of deaths in this and other countries from what might be called preventable diseases. After a review of that situation and suggesting that the so-called pacifists, with all of their activities, should give their attention more to the study of preventing diseases, rather than to imaginary peace, the article says:

"When immorality, poverty, alcoholism, prostitution, disease and insanity are interrelated phenomena; when we know so much about many of these problems; when it has been demonstrated that the ravages of these evils can be notably checked; it is difficult to understand why certain groups concentrate attention on the problem of war, about which, let us repeat, they usually know little or nothing of real value; which occurs only occasionally, and whose destructive power is insignificant in comparison with other evils.

"Which, for example, is more to be feared, a war that occurs once in a generation, lasts for 19 months and costs 50,000 lives in battle, or a disease that is ever present and costs the same country 160,000 lives and \$500,000,000 every year?"

Tuberculosis, alone, it is said, has cost this country between the Spanish-American War and the World War—16 years of peace—4,500,000 lives and about \$9,000,000,000.

"The Army Officer's Last Will" is a suggestive outline of how a will should be made to protect a widow or other beneficiary. Details as to the method of making a will and having it witnessed are given, which are of interest to everyone who has any property of any kind whatsoever to leave on passing to the other world.

A great many people fail to make a will, or if they make a will they overlook some of the technicalities connected with it essential to the protection of the beneficiary and the safeguarding of the money that may be left. A few years ago, a minister, who by his own and his wife's exceeding thrift had accumulated about \$10,000, asked the writer how he should make his will. As this accumulated money had been largely due to the good management of the wife and as there was only one son, it was suggested that the only proper way in his case would be to will everything directly to his wife and leave to her the responsibility of caring for the son. He thought the idea was a good one and it was supposed that he had made such a will; but, on his deathbed, two years later, having failed to make a will, he sent hurriedly for a lawyer, but was gone into the other world before the lawyer reached his bedside. His little property had to be taken into the Orphans' Court, kept there for five years, until the son was of age, when, under the Maryland law, the widow received one-third and the balance went to the son. Unaccustomed to handling money, he rapidly wasted his entire estate in extravagance and riotous living.

Similar cases are constantly coming to the attention of the Orphans' Court and to all people who study these questions.

The details given in this article as to how the officer's will should be made apply with equal force to all other people.

In the Infantry Journal for November there are many other articles not only of passing interest, but many also of great permanent value. A wide circulation of the magazine would be of great value to the entire country.

NO CALL WAS MADE.

THE Asheville Citizen, in a recent editorial headed, "What About Flood Relief?" states that it did not take part in the campaign last summer to try to persuade President Coolidge to hold a special session of Congress to take cognizance of the whole flood situation, but it adds:

"It is extremely disappointing to find that this (a special session of Congress) is not to be done and, to date, no acceptable explanation has been offered for the failure. It is preposterous to think that Congress can or will be able to give proper consideration to this problem at the regular session."

The Citizen in further discussing the matter says:

"This newspaper declined last summer to join with those who seemed disposed to make political capital out of what they claimed was Mr. Coolidge's inability then to take any large or warmly sympathetic interest in the magnitude of the Mississippi disaster. It does not want to see this matter made a political issue now; but, in all candor and sincerity, it must be said that the postponement now will be hard to understand. Few of us will be ready to believe that, if it were the railroads or the steel industry, or some other of the great industries that were menaced, preparations would not already have been completed for bringing Congress together to give the situation the attention it demanded.

"It is not yet too late for Mr. Coolidge to act. We hope that he will reconsider the matter and do so. The Mississippi floods of the past summer have subsided, but the wreck and ruin which they wrought are still too fresh in the public mind to be ignored."

The MANUFACTURERS RECORD knew full well that unless a special session of Congress was held for the express purpose of affording relief to the flooded district and of announcing the appointment of a commission to study the whole problem of the Mississippi River drainage basin, nothing satisfactory could be done at the coming session. In behalf of the hundreds of thousands of sufferers from the flood, we strongly urged President Coolidge in personal correspondence and editorially to visit the district and see for himself its actual needs. Mr. Hoover's constant visits were of tremendous importance, but we felt that the President should himself see the whole situation and that possibly he then would be willing to call a special session. But, there was too much politics involved, too much danger of political squabbles, and yet an offer from a leading Congressman was made to Mr. Coolidge to secure a guarantee from the leaders in Congress on both sides that nothing else would be considered except flood relief if he would call a special session; but, no call was made.

ARKANSAS.

WE are indebted to V. C. Pettie, industrial commissioner of the Arkansas Power and Light Company, Little Rock, for a beautifully printed and illustrated pamphlet entitled, "Arkansas," price \$1, issued by W. D. Self of that city. No one can study this pamphlet without having a new and broader conception of what Arkansas is, what it has, what it has already done in the way of material development, and the possibilities of the future. Every phase of Arkansas' activities is covered and the whole book is beautifully illustrated with scenes of rivers, mountains, waterfalls, farms, factories, livestock, crops of every variety and other things which make a telling appeal to the eye as well as to the brain.

Arkansas is one of the most richly endowed states of the

South. Its development is not yet in full keeping with its wonderful resources but its people are enterprising and energetic. Its resources justify all the enthusiasm of its citizens. Its business people are now united in a determined campaign, taking North Carolina as an example, to develop their highways and industrial enterprises and their educational activities, determined if possible to match all that North Carolina has done in these particulars and hoping in some respects to be able even to surpass the work of "The Old North State."

"WHAT FOOLS THESE MORTALS BE."

BILL THOMPSON, Chicago's redoubtable mayor, is making that city a joke throughout the world. If Bill Thompson's circus activities to wipe out from American school books and libraries everything which carries a word about England contrary to his views had happened in the South, this section would have been ridiculed by practically all the papers of the land. The South, however, is not so narrow in such matters, and the pity is that Chicago people of sense cannot control Mayor Thompson. The Dayton monkey campaign, in which monkeys were the chief performers, was not one-thousandth part as absurd as is Mayor Thompson's hullabaloo for fear any possible statement may be found in American school books or American histories giving a word of praise to England.

THE SOUTH NEEDS TO MAKE ITSELF KNOWN.

Pierce School of Business Administration,
Philadelphia, Pa., October 20.

Editor Manufacturers Record:

We seldom have seen so comprehensive a survey of industrial conditions for any section of the country as that contained in your "Blue Book of Southern Progress."

The Book is especially interesting to us, since we issue a weekly report on business and employment conditions in this section, and we shall doubtless refer frequently to the facts given in your book.

We are convinced that the average business man of the North does not realize the industrial progress which the South has made and which is so well set forth in the Blue Book.

S. E. BARTOW, Secretary.

And because this is true, the Southern business men should send the Blue Book of Southern Progress by the thousand to the business men of the North.

FEDERAL GOVERNMENT SHOULD BUILD NOW.

THE plans of the United States supervising architect for the proposed buildings for the Commerce Department and the Internal Revenue, the first to cost \$17,000,000 and the other \$10,000,000, which have been approved, suggest the extreme importance of the Government going ahead with all the great work that ought to be done at the present time. There is some let-up in building construction throughout the country, and the policy of the Government for several years has been to hold back some proposed work, in order to have it carried out in times of building depression.

This, therefore, is the appropriate time for the Government to take up all building projects for which plans have been made and the money appropriated, and go ahead as rapidly as possible in construction work. This work can be done at a lower cost now than will be possible when the next boom period comes and, by the Government entering the field at present, the building interests would be steadied and the slack would be taken up by doing the work which must be done by the Federal Government in the construction of buildings so badly needed.

CREDIT WHERE CREDIT IS DUE.

LONG has the MANUFACTURERS RECORD been telling of the resources and development of the Southern States. It has been widely quoted in the news columns of the press of the United States and foreign countries and in individual advertisements. Whenever such matter from our columns is republished by others, credit usually is given gladly to the source of the information, and in some instances with a spirit of pride that such a publication as the MANUFACTURERS RECORD, which has so long freely and accurately presented the resources and opportunities of the South, has discussed topics of vital interest to all concerned. All of which is heartening, for it has always been the desire of the MANUFACTURERS RECORD to aid in any legitimate manner the advancement of the South, and permission to republish has been freely granted to those who were entitled rightfully to use the informative facts in regard to the South, and discussions pertaining to the welfare of the country.

Occasionally, however, the MANUFACTURERS RECORD has been quoted literally, word for word, without permission or authority, by individuals and the press without a line of credit as to the source of the information. We frequently see such matter lifted from our editorial or news columns and used as the brain child of some one else. Though, in a way, we feel flattered that others think so much of our utterances that they give them out as their very own, nevertheless, at least courtesy, we think, should dictate the course to be followed by anyone who uses the thoughts and words of others. They do not intend to travel under false colors, for, no doubt, in many instances it is merely thoughtlessness, or carelessness. Many times, printed matter has come into our hands which looked strangely familiar and upon investigation was found to be a direct quotation from the MANUFACTURERS RECORD.

Recently, there was called to our attention a two-page display advertisement in one of the national publications by a group of trade papers. This advertisement quoted practically verbatim information as previously published by the MANUFACTURERS RECORD and the Blue Book of Southern Progress without a line of credit and, flatteringly to the MANUFACTURERS RECORD, was used as a sales argument as to why others should advertise in their columns. Really, it is too good to keep to ourselves and we must share our little joke with our readers.

This advertisement, without a word of credit, spoke of the "greatest epic ever recorded in history is being written by the South" and more of the same kind, that the South produced 38 per cent of the \$2,447,000,000 increase in the total value of manufactures in the United States and is now producing \$10,500,000,000 of manufactured goods annually; that the South has more than 23 per cent of the country's developed waterpower and in 1926 had nearly one-half of the country's total increase in waterpower development; that during the last two years more than \$100,000,000 of Northern capital has been invested in Southern mills. Though the South has an annual output of \$931,000,000 of cotton goods, this sum is less than 10 per cent of the aggregate value of the South's manufactures, but the writer of that advertisement made one bad blunder and stated that the South's cotton mills had an annual output of "\$391,000,000."

We do not object so much to the use of information as published by the MANUFACTURERS RECORD and Blue Book of Southern Progress, but we do object to the matter reprinted from our columns being misquoted, especially when the error is so glaring as to say that the South's cotton mills produce only \$391,000,000 of product a year, when they produce \$931,000,000.

The European Chemical Cartel—How Will It Affect America?

By DR. CHARLES H. HERTY, Advisor of the Chemical Foundation, Inc.

[Dr. Herty, in the following illuminating discussion on the development of the chemical industry in this country and the fight it must now face by reason of the combination of European chemical interests seeking to control the world's dye and chemical industries generally, also presents some striking facts in regard to the dangers of our bankers calling upon American investors to the extent they have been doing in putting money into European securities. The facts which he presents on these points and his argument against the repeal of the Sherman Anti-Trust law will be of interest to every business man, whether or not he is in any way whatever identified with the chemical industry.—Editor Manufacturers Record.]

Two years ago I called public attention to an approaching commercial clash, particularly in the chemical industry, between two antithetical economic systems, the one monopolistic, conceived by industrialists and approved by Government, the other the competitive system as developed in our country under the Sherman Anti-trust law. That struggle is now upon us, but along even wider lines than was originally thought, for it is not now just a trade war between Germany and the United States, but, according to recent press announcements, the participants are the German, British and French chemical industries, led by the clever and subtle hands of the Germans, against our country. Let us not deceive ourselves as to the serious nature of this industrial alignment; for, the capitalization of this monopolistic movement is already \$1,000,000,000, and there are suggestions that the combine may later include the chemical industries of other countries.

What are the purposes of this international chemical cartel?

First: Rationalization, a term which is at present being rolled glibly under the tongues of European leaders, and seems to comprise mass production, unification of sales agencies, cutting down of overhead in various ways, etc., but always in the background there appears allocation of markets and fixing of prices.

Second: From various quarters it is reported that this is a move to protect Europe against American export activities. How silly such a statement is may be recognized best by a comparison of official figures. According to our Department of Commerce, the total chemical exports for 1926 were as follows:

| | |
|---------------------|---------------|
| Germany | \$256,000,000 |
| Great Britain | 125,500,000 |
| France | 114,000,000 |
| Total | \$495,500,000 |
| United States | \$171,000,000 |

Then, in the more restricted field of dyes, alone, the exports of these countries, according to the 1926 census of the Tariff Commission, were as follows:

| | |
|---------------------|--------------|
| Germany | \$47,134,156 |
| Great Britain | 2,983,500 |
| France | 5,902,946 |
| Total | \$56,020,602 |
| United States | \$5,950,159 |

Plainly, it is not a matter of protection against the American export business, but a desire to crush it, through fear of what it may become.

Information as to the actual beginning of this commercial warfare has just been furnished by Hon. Miles Poindexter, who has recently resigned as Ambassador to Peru, according to a Washington dispatch to the New York Times of November 3, which states that "vicious propaganda designed to weaken the prestige of the United States and to take away

the trade which this country recaptured after the World War is being aggressively circulated throughout South America.

* * * Russia was the principal agitator, but some other European countries also were seeking to arouse resentment against the United States in the Southern Continent." It would be highly interesting if Mr. Poindexter would enlighten us more specifically as to what "other European countries" are behind this attack.

Third: Of more serious import are the indications of a belief in Europe that eventually tariff barriers will be lowered, and they will be able to seize the American home market. This is a threat not only against the American industry, but also against every American consumer; for, where would those consumers be today if, instead of being independent of foreign sources of supply, they were at the mercy of the international cartel which includes those countries which owe us such large debts?

Fourth: Even in the midst of the gravity of this situation, there are humorous sides; for M. Agache, a leader of the French industry, publicly proclaims that eventually it is hoped to include America in a "rational organization of world trade." Then, what would be the position of consumers throughout the world?

Fifth: Still more humorous, however, is the reported statement of Sir Alfred Mond, a leader of the British industry, that the "British aim in coming closer to the Germans is to bring the German and American groups closer together." What more remarkable and ludicrous statement may we expect next?

Whatever the purpose of this combine, there is no doubt about the deep significance of the outcome of this commercial struggle to our national welfare; for this chemical industry, in view of the developments of modern warfare, is rightly regarded by the heads of our military departments, by our leaders in Congress and by the public at large as the backbone of national defense should we at any future time be drawn into war. That it is so regarded, not only by us but also by all nations, gives full justification for the designation of this international cartel as an actual offensive military alliance against the United States.

Closely bound up as is this question with our economic independence, the health of our people, and the security of our nation, it becomes our duty and glorious privilege to throw into this fight every ounce of American energy, resourcefulness, initiative and courage. And we must think clearly and not be led into any false steps.

No one can question the immediate advantages accruing from the cutting down of overhead, the building up of reserves and the systematization of production and distribution. And so in the last few weeks there have been those who are outspoken for a policy of fighting the devil with fire, which would require a repeal of the Sherman Anti-Trust law. I do not question the sincerity of a few prominent men in the chemical industry who have thus spoken. I do, however, protest against certain publications of a vague and general nature which purport to represent the sentiment of the

An address before the Salesmen's Association of the American Chemical Industry at the Machinery Club, New York city, by Dr. Charles H. Herty, advisor of the Chemical Foundation, Inc.

chemical industry, but which on investigation have been found to be nothing more than backroom talk on the part of small fry.

Let us not forget that America once tried the monopolistic system and turned from it in absolute disgust; let us remember that it is under the Sherman Anti-Trust law that America has grown to her present prosperity. The question is not what is the immediate good, but what will be best in the long run—best not only for our chemical industry, but also of far greater importance, best for our country as a whole.

Europe has proceeded to cartelization because of the lack of laws similar to our anti-trust laws. Our country has been beset with visiting groups of foreign industrialists who have not looked deep below the surface of things American; have recognized evident advantages in mass production, but have failed to study our economic history during the period when we changed from monopolistic to competitive business methods. That is a great error they make, and I predict that as the years go by they are going to pay dearly for the mistake. No matter how strong industries may become, no matter what influence they may secure in government affairs, the interests of the consuming public can never be safely ignored. Human nature, after all, contains a large measure of selfishness, and universal trusts, which are administered by human beings, result in placing the public's interest too largely in the hands of a few. We saw a similar situation in military circles in Europe in 1914, and we know the result. The only safeguard would be the absolute supervision and control of industry by Government, but this is a step toward nationalization of industry, and who can contemplate serenely an approach to conditions as they are in Russia today?

If our manufacturers desire to combine for the purpose of fighting an export war, full authority is given under our existing law, the Webb-Pomerene Act. If a number of our smaller manufacturers wish to form a larger and more efficient unit, it can safely be done under our present laws; for as the industry is organized at present, such a unit would in no wise diminish active competition. There are in this country only three manufacturers of indigo, but in no other item of our trade is there more intense competition.

Suppose, however, the Sherman Anti-Trust law were repealed in toto, is there anyone of you who believes in his heart that there would result a unification of our chemical industry, the formation of an American chemical trust or cartel? I do not hesitate to say that I know there would not be any such amalgamation, and I have definite knowledge on which I base that statement.

I am glad to note from press statements that intimations already given out from the White House point very clearly to the fact that such repeal would not meet with favor in that quarter.

It is evident that Government authorities are giving serious consideration to the present situation; for in an address before the National Paint, Oil and Varnish Association, recently, Assistant Attorney General William J. Donovan, pointing out that the Government and courts already have taken steps to defend the American business system against encroachments by foreign monopolies, declared that the effect of this action "may well be to include those who finance a foreign monopoly in its effort to violate our law." Discussing these international cartels, Mr. Donovan said:

"In their expansion they set up agencies in the United States and they harass American business, which is under the handicap of being forbidden to fix prices or otherwise to mobilize itself as a monopoly.

"Already our laws, our judicial decisions and our administrative practices have shown willingness to protect our American principle of free competition. When the Yucatan sisal monopoly set up an exclusive selling agency in America, the Supreme Court enjoined it.

"In a case now pending against certain foreign monopolies

it is asserted that because these are agents of a sovereign power they are therefore immune from prosecution. If this condition be sustained, then we would find the curious situation that the limitations placed upon our own corporations shall not be applicable to a corporation which is an instrumentality of a foreign government."

There is another thing we must keep in mind when we discuss repeal of the Sherman Anti-Trust law; namely, its effect upon the protective tariff policy. In the determination to preserve this industry for our country Congress gave to it an ample measure of protection. I am happy to record the conviction that the industry has not abused the privileges of that protection, but has passed on to the consuming public the benefits of increased efficiency of operations. As authority for that statement I refer anyone to the annual Census of Dyes and Other Synthetic Organic chemicals, published by the United States Tariff Commission. With each year since the industry was really begun, prices have been steadily reduced. There can be no justification for any change in this protective policy so long as the industry maintains its splendid record. I believe in the protective tariff principle as a sure method of stimulating industrial activity and bringing about prosperity, but I believe in it only when supplemented by such a statute as the Sherman Anti-Trust law, which, if administered vigorously and fairly, but never in a spirit of persecution, would always assure competition.

Let us examine for a moment this international cartel and see what it really represents. It is a hybrid alliance. No one can make me believe that the Germans, the French and the English are going to sit around a table forever in continual harmony, even though guided by so clever a hand as Dr. Bosch, head of the I. C., who has so adroitly maneuvered this international cartel into existence for the ultimate concentration of chemical research in Germany. I understand that the moving spirit behind the French part of it is M. Frossard, a brilliant technician, trained, I think, in the Badische plant, but I have had distinguished Frenchmen and Britishers talk to me about this industrial leader, and I can well foresee upsets ahead.

I once took a representative part in an international conference in which British, French, Belgian and Italian interests were represented. The conference went smoothly during its session, but I have never forgotten the cordial invitation I received from the British representatives immediately after adjournment to hurry with them that evening to Leverkusen, in the British military zone, and take part in the grabbing of the best part of the supplies there impounded. Fortunately, the Inter-Allied Rhineland Commission refused the permit for shipment of these goods until an equitable distribution had been made.

We do not have to go back so far, however. What could be more grotesque than the proceedings of the International Steel Cartel at Luxembourg within the last month, as reported in the New York Times, October 3, where it is recorded that Germany far exceeded her quota of production, thereby accumulated fines of millions of dollars, and then succeeded, despite French opposition, in having the fines so reduced that it "has left the way open for practically unrestricted domestic production, an end which Germany has been earnestly seeking."

What constructive suggestions can be made in the alignment of American forces for this struggle?

First: Certainly, we have a right to ask American banking interests that as good Americans they give thought to the matters at stake when they are called upon for foreign loans. Our great banking institutions serve as a directive channel for the flow of investments of individual American citizens, whether they be capitalists, merchants, professional men and women or laborers. Here is an example: It is reported throughout the European press that the German cartel, the

I. C., has, through exchange of stock, merged with the Norwegian Hydro-Electric Company, and that the latter is contemplating a great expansion of its operations for fixation of nitrogen through a loan of \$20,000,000 which it expects to get through one of the great American banking organizations. Is it right that the savings of our people should be directed by this institution to the support of a European monopoly which will seek the destruction of the American nitrogen fixation industry, now so rapidly developing in numerous sections of the country? Are our bankers simply middlemen or brokers whose only thought is the commission they want, or are they thoughtful leaders who, in their position of great advantage, keep constantly in mind these questions of public welfare?

Unfortunately, we have not yet as a nation grasped clearly the thought that these great international loans, which have increased so rapidly during the last month, do not represent so much amassed capital in the hands of a few, but rather the savings, through economy, of the many. I commend to your thoughtful attention the clear exposition of this subject by Hon. Dwight Morrow, our present Ambassador to Mexico, in a brilliant article in *Foreign Affairs* of January, 1927, under the title, "Who Buys Foreign Bonds?" Mr. Morrow says the purchaser of such bonds is "the person who has saved something, who is doing without something today in order that he or his children may have something tomorrow." Again, he says: "The purchasers are people all over the United States who are investing their savings." Are these economies to be exercised, these savings to be utilized, to strike blows at the very vitals of our own country? How many of these investors read the dispatch from Berlin in one of our leading newspapers on October 26 of this year, in which Dr. Koehler, the German Minister of Finance, stresses the necessity for secrecy for the recent communication of Mr. Gilbert, the agent of the Dawes' Commission, for the reason that it "contains detailed information on a number of German municipal and communal loans from America which are not being used as the American public believes and which would cause dissatisfaction and financial difficulties"? I think the American investor is entitled to receive, either from his banker or from his Government, a full explanation of what is meant by that remarkable statement.

Second: Still closer and more harmonious relations should be established between our industry and all Government bodies, especially with the Federal Trade Commission, which was created primarily for the purpose of aiding industry.

Third: Adequate funds should be provided by Congress for enabling the Department of Commerce to furnish prompt, complete and reliable statistical information on all lines of the chemical industry.

Fourth: Particularly in the interest of the smaller manufacturer, Congress should remove from paragraphs 27 and 28 of the Tariff Act, covering coal tar intermediates and finished products, the restriction which would now prevent the President of the United States from increasing, under the flexible provisions of the Act, the duties on individual products which might well be made the target of attack by the European cartel. In the light of history, this would not hold the consumer up, but it might effectually repel the invader.

Fifth: More and more, we must depend upon research. This fight is not one which is going to be for a day, a month or a year. It will be a long fight and, while there are difficult financial questions which must be soundly handled, the great reserve of the chemical industry must be sound fundamental research.

Sixth: Every encouragement must be given to lead the best of our students to seek chemistry as a profession, and when they enter their universities let it be with a determina-

tion to secure thorough graduate training, so that eventually they may do their full share in bringing victory.

Seventh: The salesman has his part to perform. What higher incentive could there be for the development, through your organization, of the finest type of salesmanship the world has ever known—a salesmanship which is informed, aggressive, resourceful, and forever on the job?

Eighth: Constant strengthening of our trade associations, and active participation in these by all representatives of the industry. Through these channels there can be cultivated that spirit of co-operation which can prove so helpful, and can be developed absolutely within the letter and spirit of our laws, and without breaking down in the slightest a truly competitive system.

Conscious of the impossibility of enumerating in this brief address all of the factors which may rightly be brought to bear to aid in the preservation and continued growth of the American chemical industry, I urge each of you to give your most constructive thoughts to this vital subject.

Such thinking can well be based upon a boundless optimism; for, our industry is now well rounded out and the accomplishments of the past decade beget confidence of still greater triumphs to come.

Nay, more, you live in a country of great natural resources, a land where vast wealth has been accumulated, where labor is happily receiving a larger measure of reward than in any other, and where public opinion is well informed on the blessings of chemistry and appreciation of all that has been accomplished in our midst.

Best of all, you are the inheritors of a pioneering spirit, restless and daring, which overcame all difficulties, conquered a wilderness and made of it a nation, which only a few years ago, when thoroughly aroused, amazed the world with its mighty power.

The Dead Sea As a Possible Source of Wealth and As a Producer of Potash.

A dispatch from London gave the following interesting information as to some of the possibilities of the Dead Sea:

"Once known as the 'nickel king' because of his vast holdings in nickel mines throughout the world and more recently before the public eye as one of the organizers of a billion-dollar European chemical combine to compete with American interests, Sir Alfred Mond achieves new prominence in an article published by the *Sunday Times* of London.

"The *Times*, Associated Press dispatches report, announces that a subsidiary of the Imperial Chemical Industries, Ltd., the English chemical combine organized last year by Sir Alfred, has obtained a concession for reclaiming the vast mineral resources of the Dead Sea after competition with American and Continental bidders.

"Expert examination, according to the *Times*, has shown that the Dead Sea is a practically inexhaustible source of potash and that its exploitation probably will be the making of Palestine, in whose development Sir Alfred is intensely interested. The *Times* describes the grant as 'the most coveted prize in the way of development concessions which has been competed for in modern times.' The British Colonial Office and the Palestine and Transjordan governments took part in the negotiations."

\$500,000 Medical Arts Building for Charlotte.

Charlotte, N. C.—Details are being arranged for the erection of a \$500,000 medical arts building here, for which Matthews H. Tardy of Macon, Ga., has been commissioned to draw plans. The structure will be 10 stories, equipped with X-ray laboratories, drug store, emergency operating rooms and dental and medical supply rooms. It will be financed and owned by the Union Professional Building Corporation of this city.

A \$24,000,000 Hydro-Electric Development in South Carolina.

W. S. Barstow, a New York banker, president of the General Gas and Electric Corporation, the Lexington Water Power Company and W. S. Barstow & Co., after a visit to the great hydro-electric project now under way in South Carolina by his organization, in a statement prepared for the MANUFACTURERS RECORD says:

"I was greatly impressed with what I saw on my recent trip to Columbia, S. C., where I went with a party of officials and bankers to inspect the site of the hydro-electric project on the Saluda River, 10 miles west of Columbia. It was my first visit to Columbia since work actually started on this development and, while I was as fully conversant with the undertaking as is possible from a study of maps and engineers' reports, I did not have a real picture until I stood on the site of the proposed dam.

"Readers of the MANUFACTURERS RECORD are aware of the size of the undertaking, as its news columns have set them forth in considerable detail. But I, myself, was greatly surprised as I stood on the spot designed to be one end of the dam and looked across the Saluda Valley along a line of stakes extending 8000 feet, which is to be the length of the dam. And, then, to visualize a mountain of earth containing, our engineers estimate, 11,000,000 cubic yards—the world's largest earth dam—was somewhat easier than trying to get a mind picture of the same thing from paper.

"During the next three years, the length of time which it is expected to complete the undertaking, the Lexington Water Power Company and the Broad River Power Company will spend approximately \$24,000,000 in South Carolina. Upon the completion of the Saluda hydro-electric plant there will have been formed by the General Gas and Electric properties the most efficient group of generating units imaginable. This, of course, is to include the system of the Broad River Power Company, which we also control, and its series of hydro-electric and steam generating stations and with which the Lexington Water Power Company will be interconnected. The importance of this undertaking to the South in general,

and to South Carolina in particular, may be no better set forth than in the statement of Governor Richards, who at a banquet tendered our party declared that South Carolina would rank third among the States in point of hydro-electric development, rather than fifth, as at present—California and New York only would then outrank South Carolina.

"Greater industrial growth is bound to follow the hydro-electric development on the Saluda River and, with its completion, business expansion should be greater with benefits, of course, accruing to Central South Carolina. Before undertaking such a large task, involving more than \$20,000,000, my associates and I were thoroughly convinced that in the continued industrial growth of South Carolina there would be real need for an additional and dependable source of electric power. Such a supply of power, obtainable at reasonable rates, is bound to attract new industries to the territory served, and not only are we of the Barstow organization behind the Saluda project in a financial and managerial way, but also we are straining every effort to draw new business to that territory in and about Columbia served by the Broad River Power Company.

"Our Industrial Development Division reports that a large number of industries from various Northern points have shown an interest in what we are doing in and about Columbia and, as many of them are contemplating changing their locations to the South, it is only reasonable to suppose that some of them will settle in our territory. We shall do our utmost in this direction and the civic and business organizations of Central South Carolina are working at present along the same lines, both in direct co-operation with us, as well as independently.

"To get back for a moment to the Saluda project, I might state that more than 1000 acres of land have been cleared already of timber around the dam site, and steam shovels, railroad equipment and several hundred men are now on the job. Before the end of the year the operating force will have been considerably increased in numbers and work will be under way at full speed."

Therapeutic Value of Florida Grapefruit.

"The efficiency of citrus fruits, particularly grapefruit, as a medicinal agent has been known for several years to the medical profession of Florida, especially to those doctors located in the central part, or ridge section, of the State, where the highest quality fruit is grown." Such is the opening sentence of an article by Dr. E. C. Taylor and Dr. R. H. Alter, reprinted from the Journal of the Michigan State Medical Society for October, F. C. Warnshuis, editor, Grand Rapids, Mich.

Dr. Emile Roy, "a thoroughly ethical physician, formerly of Tulsa, Okla.," adds the article, "makes the convincing statement that every case of diabetes and glycosuria where no degeneration of the pancreas has taken place, or no cerebral pressure from the brain growth exists, will become sugar free in a few days under the usual anti-diabetic diet and six grapefruit daily, grown in proper soil conditions on the hills."

Several specific cases of remarkable interest are cited in the article, which concludes:

"We do not claim that this treatment will act as promptly as insulin in cases of threatened coma from greatly excess sugar, because it cannot be given hypodermically; but, after the grapefruit treatment is well started, it has proved to us

almost beyond doubt that no such condition will arise unless invited by the patient.

"Our results in arterial hypertension in about the same number as the diabetic cases have proved even more satisfactory. In every case where well-defined arteriosclerosis did not exist we got a great reduction in blood pressure, in some cases as much as 80 points. Forty and 50 points were common and up to this time there has been no recurrence. The improvement in assimilation in all of these conditions has been beyond belief."

Union Gas Utilities to Place \$3,000,000 Bonds.

G. E. Barrett & Co. of New York city, who, with Frederick Peirce & Co., also of New York, are offering a \$3,000,000 issue of 10-year 6½ per cent gold bonds of the Union Gas Utilities, Inc., advise that the company's subsidiaries operate in Kansas and Oklahoma. David A. Belden of St. Louis is president and James P. Reilly of New York secretary. Proceeds from the sale of the bonds will be used to pay a portion of the cost of the capital stocks of the Union Gas Corporation and of other subsidiaries to be acquired by the Union Gas Utilities, Inc. The Union Gas Corporation and its subsidiaries are engaged in the production, transportation and wholesale and retail distribution of natural gas for public utility and industrial purposes.

The Truth About Manganese.

By J. CARSON ADKERSON, President, American Manganese Producers' Association.

[The statements made in the following article by Mr. Adkerson have been, he advises the Manufacturers Record, carefully checked over and "are correct and can be firmly established." It is extremely important to have these facts presented to the public, because the general impression of those who have been seeking to have manganese on the free list, in order to bring in Russian manganese, creates an entirely different impression as to the available manganese in this country. If the statements made by Mr. Adkerson are questioned by anyone, we think he will be in a position to maintain his assertions.—Editor Manufacturers Record.]

Manganese is absolutely essential in the manufacture of steel, and neither experiment nor research has developed a substitute. In the countries producing the greater portion of the world's steel, Russia alone has been recognized in the past as the only nation having within its geographical boundaries sufficient supply of this mineral to meet its own demands.

The question of assuring an adequate supply of manganese for American industries in the event of a blockade, or during a period of an emergency, has, since the lesson learned during the World War, been one of grave concern to the United States. However, during the past few years, under the encouragement of the tariff, developments of manganese in America have proceeded as never before in history, and recent increases in reserves in both high and low grade ores, and the inauguration of new and successful processes in the beneficiation of low grade ore, give assurance of a domestic production sufficient to guard the security of the nation in an emergency and promise eventually to make it independent of foreign sources of supply.

In the Butte district of Montana, \$400,000 is being spent by the Domestic Manganese Development Company in erection of plants, and contracts have been entered into by this company for the delivery of 875,000 tons of manganese ore during the next five years, which will give a finished product of 675,000 tons, the ores running from 50 to 66 per cent metallic manganese. The Anaconda Copper Mining Company, the Butte Copper and Zinc Company, the Clark Montana Realty Company and others of the Butte district have large deposits of manganese ore determined and opened up ready for mining to fill contracts now entered into.

In the Philipsburg (Mont.) district the Trout Mining Company is now producing approximately 20,000 tons a year of high-grade chemical ore and large reserves have been developed in advance of mining. The Moorlight Mining Company, the Philipsburg Mining Company, the Silver Prince Mining Company and other mining and development activities are adding materially to the output and reserves of manganese in this district.

Minnesota reports sufficient ore with a manganese content, which, when recovered, would alone supply the needs of the United States for more than half a century. A conservative estimate of this ore, which it is claimed may be recovered, is put in excess of 100,000,000 tons. Present production of higher grade manganiferous ore in Minnesota is approximately 2,000,000 tons a year.

In New Mexico, the Silver Spot Mines at Silver City and other operators in that territory have a production of 40,000 tons annually of manganiferous ore, and R. H. West has for some time been engaged in a substantial development and production of high grade ore near Deming.

The Batesville, Arkansas, district reports production at the rate of approximately 15,000 tons of high and low grade ore annually, which output is steadily being increased. This district alone claims in excess of 30,000,000 tons of manganiferous ores from which the manganese may be profitably recovered.

The Georgia Minerals Company, with large holdings near

Cartersville, is prepared to ship 20,000 tons of ferro grade ore annually, with assurances of increased shipments as conditions may warrant. The Etowah Development Company and others in the Cartersville district have deposits of considerable extent and are entering the ranks of actual production.

In Virginia, where the first manganese ore in the United States was mined, in 1832, the Hy-Grade Manganese Company, actively engaged in mining in the Shenandoah Valley, is making ready to market 30,000 tons of high grade ore yearly. The Brown Mountain Mining Company, in the Blue Ridge area, is developing a deposit similar to the famous Crimora basin and the Virginia Manganese and Mining Company in southwest Virginia is extensively engaged in development and production.

Large deposits of low grade ores are known to exist in the Olympic Mountains in Washington, and these ores can be made available through beneficiation. Considerable development is in progress in that State, in both high and low grade ores.

Developments in high grade ore, or research in beneficiation in lower grade ores, of more or less importance, are under way on deposits in Idaho, Arizona, Colorado, Nevada, New Jersey, Massachusetts, Tennessee and Alabama, and manganese deposits are known to exist in California, North Carolina, Oregon, Oklahoma, Wyoming, Texas, Utah, West Virginia and South Dakota.

In addition to the present mining operations in localities where high grade ores exist, methods for the beneficiation of low grade ores have passed the experimental stage and several plants either have been completed or are in process of erection, for commercially treating the low grade ores. Notable among the processes evolved for the profitable treatment, by beneficiation, of ferruginous ores, is the Bradley process, which is based on leaching with sulphate of ammonia, the results of which are so satisfactory that approximately \$200,000 have thus far been invested in the development and practical application of this process in recovery of manganese from low grade ores.

In almost every section of the United States where manganese exists, there is unprecedented activity in the development of the mineral and one need not be an optimist to foresee the time, in the near future, when the major portion of American needs of this essential mineral will be supplied from American mines, if the present tariff is not removed.

It is evident from a study of the manganese situation that the operators of America, who are investing hundreds of thousands of dollars in the development of the manganese reserves of the country, are accomplishing far more for preparedness and national security than those who cry that we have no manganese and cannot develop an industry at home. It takes years and dollars to develop a reserve and years and dollars to perfect and apply a process, but the work of the pioneer has blazed the way and the rewards serve as a safeguard to the Nation. Listen to the words of the eminent British metallurgist, Sir Robert Hadfield, quoting an ancient Chinese proverb, "They who own the iron of the world rule the world." He adds, "It would also seem safe to say that they who own the manganese of the world have largely in

their hands the control of steel of satisfactory quality such as is now necessary to meet modern requirements."

Those who pray for the removal of the tariff would encourage the further development of manganese resources of foreign countries and deal a death blow to this vital American industry.

Ice Manufacturers Meet in the South.

Experiences of the past year and plans and prospects for the future were discussed at the tenth annual convention of the National Association of Ice Industries, held at Atlanta last week, this being the first meeting of the organization in a Southern city. Approximately 1000 delegates and visitors participated in the sessions, coming from virtually every State and from Canada, Mexico and more distant places.

Among the features of the convention was a disclosure that nearly \$1,000,000 is invested in the industry and that its production runs to approximately 60,000,000 tons of ice a year. On the basis of figures showing that only 40 per cent of the homes of America have ice boxes of any kind, the Association this year is spending \$300,000 in educational publicity, to instruct housewives on the advantages of ice usage. Research studies for the Association also are under way in the bureau of home economics, Department of Agriculture, for the purpose of establishing the value of ice as a household necessity. Harmful rivalry from the introduction of domestic refrigeration devices was not feared by the delegates at the convention.

"The most important items in our evolution," said A. Hardgrave of Kansas City, vice-president of the Association, in an address on Industrial Relations, "in the order of their importance should be: Management, delivery and public contact, merchandising, financial structures and production methods."

The convention was called to order by J. E. Muckerman of St. Louis, president, and a feature of the meeting was a visit to Stone Mountain under the auspices of the local ice men and accessory dealers and the Georgia Power Company.

Tung Oil Development in Florida.

Possibilities of an extensive development of a tung oil industry in Florida were outlined by Dr. H. A. Gardner of Washington, D. C., in an address before the National Paint, Oil and Varnish Association at Atlantic City recently. Dr. Gardner, who is chairman of the scientific section of that association, said, in part:

"Tung oil trees, grown in Florida, now four years old, are producing as much oil as most of the 10-year-old trees grown in China. Tung oil is the base of all waterproof paint.

"The greater bearing qualities of the Florida trees is due to the fact that they are grown in groves, are fertilized and that research is carried on at the groves, whereas in China the trees grow wild.

"We have every reason to believe that when our Florida trees are eight years old, four years hence, the crop will be the best and the largest ever produced from a like number of trees.

"We now export 15,000,000 gallons a year from China. To get this much from Florida there will have to be planted 50,000 acres, or 47,000 more than are planted now.

"Tung oil groves should become a productive industry in Florida."

To Make Torpedoes for Shooting Oil Wells.

The United States Torpedo Company, with offices at McCombe, Texas, has purchased 40 acres of land three miles west of Fort Stockton for the establishment of a plant to manufacture torpedoes for shooting oil wells according to Otto Carr, secretary of the Fort Stockton (Texas) Chamber of Commerce.

\$20,000,000 Steam-Electric Plant to Be Erected by Alabama Power Company.

Construction to Begin on First Unit Costing \$5,000,000 Soon As Permit Is Granted.

Application for permission to begin constructing one of the largest steam power plants in the South, involving an eventual expenditure of \$20,000,000, has been placed before the Alabama Public Service Commission by the Alabama Power Company. Construction on the first unit of the gigantic plant will begin as soon as the permit is issued, according to Thomas W. Martin, president of the power company. This unit will cost approximately \$5,000,000 and will have a capacity of 50,000 kilowatts, it was said. The additional construction will go ahead as rapidly as the demand for power increases.

The plant will be near Gorgas, Ala., close to the Warrior River and will be one of the country's most modern steam-electric power plants, the announcement declared. The ultimate capacity will be 200,000 kilowatts, or 270,000 horsepower. The project will be built by the Dixie Construction Company, a subsidiary of the Alabama Power Company.

The only steam power plant in America matching this project, the announcement said, is one at Philadelphia.

"The increasing demands for power and the duty of a public utility to anticipate the actual needs of the State make it necessary, in the opinion of the officers of this company, to proceed with the additional plant," Mr. Martin stated in announcing the project.

American Farm Congress Meeting.

Described as of especial interest at this time, the twenty-second annual convention of the American Farm Congress will be held at Kansas City, Kan., November 15, 16 and 17, with such subjects on the program for consideration as inland waterways development, flood control, farm relief legislation, taxation, freight rates, livestock markets, the corn borer situation and farm credits. Few set speeches will be made, but round table discussions will be held on topics presented by men of recognized standing.

Among the speakers on the list are John Fields, vice-president of the Federal Farm Loan Bank, Wichita, Kan.; Dean F. C. Curtis, Iowa State Agricultural College; Joseph H. Mercer, secretary of the Kansas Livestock Association; Walter Parker, executive director of the National Flood Commission, New Orleans; Col. William M. Pelouse, chairman of the Illinois Deep Waterway Association; A. J. Weaver, president of the Missouri River Navigation Association; Congressman Homer Hoch, author of the Smith-Hoch railroad rate resolution, and Clyde M. Reed, representing farm groups in freight rate cases.

Building 1,000,000-Gallon Filter Plant.

Details regarding the filter plant at San Benito, Texas, with a capacity of 1,000,000 gallons per day, have been submitted by the Central Power and Light Company of San Antonio, S. M. Udden, general superintendent, who states that construction is being handled by the company's own organization and that plans were prepared by Alvord, Burdick & Howson of Chicago. Filtering equipment will be purchased from the International Filter Company, Chicago; pipe and fittings from the United States Cast Iron Pipe and Foundry Company, Birmingham, and valves from the Darling Valve and Manufacturing Company of Williamsport, Pa.

Cutting Carolina Cotton Costs by Co-Operation.

By STANLEY F. MORSE, Dalzell, S. C.

[Stanley F. Morse, the writer of the following article, has been engaged in agriculture for over 20 years. He has organized several farmers' associations, is an active member of one of the most successful farm cooperatives, and for a number of years has been consultant to several large commercial farming companies in this country and in Latin America. He is a member of the American Society of Agricultural Engineers.—Editor Manufacturers Record.]

The value of an efficiently managed farmers' cooperative for cutting the costs and increasing the price of the product handled cannot be fully appreciated by the average farmer unless he makes a personal investigation of the operations of his cooperative. However, this is not possible for every farmer, and no doubt there are many who will be interested to hear about a visit I recently made to the South Carolina Cotton Growers' Cooperative Association at Columbia.

This cooperative is now entering its sixth year of operation and during its five years of existence has handled over 512,000 bales of cotton. It is affiliated with the American Cotton Growers' Exchange, which has, through its 13 member associations, handled 5,750,928 bales since 1921. Of the 1925-26 crop, these associations marketed 1,610,000 bales. Yet, this is less than 10 per cent of the 1926-27 United States crop, and still far from the percentage of the total cotton output which the cooperatives should be handling. In fact, this very lack of volume of cotton handled is a distinct handicap to the cotton associations, because it increases the overhead cost of marketing each bale. Thus, the South Carolina Cotton Growers' Cooperative Association, handling about 100,000 bales annually, has to compete with cotton merchants who may handle, say, 200,000 to 300,000 bales each. Assuming that approximately the same office and executive staff can take care of the larger number of bales, it is evident that this overhead cost of handling the smaller number is greater; hence, increasing the membership and volume of business will proportionately decrease the overhead.

Nevertheless, it is a fact that the South Carolina Association marketed the 1925-26 cotton crop at a total cost of \$6.26 a bale, or 1.25 cents a pound, while local cotton factors were charging as much as \$11.25 a bale. The 1925-26 short staple cotton costs of the South Carolina Cooperative were per bale: Interest, \$1.32; insurance, 40 cents; compression, 23 cents; storage, \$1.52; handling, 54 cents; overhead, \$1.95; American Cotton Growers' Exchange, 30 cents; total, \$6.26.

To compare cotton handling costs in the season of 1922-23, the Federal Trade Commission made an investigation of six cooperative cotton marketing associations, handling 514,511 bales, and 35 cotton merchants, handling 1,796,610 bales. Following are the significant comparative figures:

| Per bale | Co-operatives | Merchants |
|-----------------------------|---------------|-----------|
| Selling price | \$137.61 | \$134.15 |
| Purchase price | *129.92 | †122.09 |
| Total handling expense..... | \$7.69 | \$12.06 |

*Growers actually received this amount.

†This was price paid to smaller merchants who had paid an even lower price to the growers.

Why is it that the cooperatives are able to handle their cotton more cheaply and pay their members a better price? My investigation shows that among the several reasons for this the following are particularly important: (1) Storage and insurance charges are lower; (2) interest cost is $4\frac{1}{2}$ to 5 per cent, compared with 8 per cent for merchants; (3) no commission is paid, cooperatives doing all selling at cost; (4) there are no sampling losses; (5) premiums for the better grades go to the cooperative, not to the merchants; (6) all unnecessary bank and other miscellaneous charges are eliminated; (7) everything possible is done by the cooperative to grade all cotton fairly and secure the best

available prices for it. It is interesting to go into some of these matters more in detail.

The South Carolina Association secures more reasonable storage and insurance rates by "concentrating" most of its cotton in warehouses in Columbia, which operate under Federal licenses and receive Federal inspection. Cotton coming into Columbia to be stored until sold enjoys the advantage of through freight rates, since cotton thus stored is considered "in transit" until sold and shipped. As soon as a member's cotton has been ginned, baled and moved 100 feet or more from the gin, it is covered by insurance. Arriving at Columbia, each bale is sampled and classed and assigned to a grade, color and staple length, which is given a number designating the pool to which it belongs. There are now 94 short staple pools and 102 long staple pools. In the warehouse, all bales of the same pool number or class are stored together, so that, when sold, shipments may go forward promptly. Concentration of cotton thus not only makes it possible to fill large orders without delay, but also actually reduces classing costs by eliminating the traveling expenses of the cotton classers, who would otherwise have to travel to country points to class the cotton, and enables the classers to grade many more bales per man. Insurance charges are also cut, as the cotton is protected by a sprinkler system and the lower grades take a lower rate.

Interest charges are lower because the cooperatives are able to secure Government funds at $4\frac{1}{2}$ to 5 per cent, while cotton factors, having to borrow from commercial banks, charge a minimum of 8 per cent. Indeed, the average merchant charges "all the traffic will bear." A former cotton buyer told me that country buyers make a practice of paying cotton growers a cent under the market, "to cover cost of freight," as they explain. One former cotton merchant, now an official of the Cooperative, related to me that he used to handle from 15,000 to 20,000 bales of cotton a year and that he annually paid to his local bank for interest and exchange the sum of \$3000. These charges alone amounted to from 20 to 50 cents a bale. Instances are also cited of banks controlled by cotton mills which will not buy cotton unless the business is handled through their own banks, and some of these banks are said to be paying unnecessarily large salaries to members of the families of the principal stockholders. This explains not only some of the high costs of cotton marketing, but also why many banks oppose the cooperative and do not wholeheartedly support the reduction of cotton acreage.

In visiting the warehouse where the Association's cotton is stored, I saw bales of cotton made from samples taken for classing. When a cotton factor takes such samples, averaging a pound each, he appropriates these cotton samples. Ordinarily, a factor samples a bale of cotton three to five times, so that three to five pounds of cotton are taken from every bale. So, a factor handling 20,000 to 30,000 bales a year and pulling only three pounds from each bale will secure 125 to 200 bales of cotton, which he sells for his own account to the tune of \$7500 to \$20,000, according to the prevailing price of cotton. As the Georgia Cotton Pool News states, cotton thus obtained is "jokingly referred to in the cotton trade as 'city crop'." One of the big factors is reported to have discharged his head cotton classer

"because this man did not take as much in cotton samples as had been done in previous years and because the profits from pulling samples was \$5000 less than it had been the year before." At any rate, not only is this sampling reduced to a minimum by the cooperative, whose samples average about one-half of a pound, but also all cotton thus "pulled" is carefully graded, baled and sold for the association's account, all the proceeds thus being credited to its members. The value of cotton thus secured through sampling by the South Carolina Association is \$121,086.73 for four years, or \$30,271.68 a year—all saved for its members.

Another source of loss to the cotton farmer has come from putting too much bagging on the bales. One reason for this has been that some farmers have thought they could get cotton prices for jute bagging by covering their bales with more bagging than the 22½ pounds tare allowed per bale. This surplus bagging is easy for classers and buyers to spot and has been cut off, weighed and the grower docked on the weight of his bale, until he has now learned that over-bagging does not pay. The Cooperative is now trying to induce its members to use a standardized method of bagging cotton. Indeed, it is probable that, as it acquires its own gins and controls the kind of bagging used and the baling process, a standard bale will be produced. At present, bales vary in weight and in make-up. Thus, loose, badly made bales lose much cotton en route and expose more cotton to damage. Efforts of the Association to prevent "country damage," caused by careless handling and inadequate shelter before the cotton is shipped, are resulting in reduced losses from this source, while checking and rechecking of weights insure that the grower is getting fair treatment.

Of particular importance to the members of the Cooperative is the inauguration of "split-grades" in classing the 1926-27 crop. By "split-grade" is meant the use of a grade between the existing grades. Thus, in the regular scale the grade above "middling" (the standard, basic grade) is "strict middling color, middling leaf." The split-grade is a grade between these two. With middling cotton of seven-eighths inch staple at its present price of 20.25 cents a pound, the closer grading of cotton, which will show a bale to be half a grade better, will bring 35 points additional, or \$1.75 a bale more. On middling inch staple, the increased price is \$7.50 a bale. Heretofore, so I am informed, this split-grade profit has been made by the cotton merchants and not by the growers. In fact, it is stated that cotton buyers usually purchase cotton a split-grade below and sell it at a split-grade above its normal grade. Now, the Association members are profiting from this expert classing and experienced salesmanship.

The savings which the cotton cooperatives are obtaining for their members are clearly shown by the following figures compiled by the Arkansas Cotton Growers Cooperative Association, based on a \$100 bale:

| | |
|---|---------|
| Loss from incorrect grading..... | \$4.50 |
| Average "country damage"..... | 4.00 |
| Country buying cost..... | 2.50 |
| Mill broker's profit..... | 1.50 |
| "City crop" (unnecessary samples)..... | 1.00 |
| Difference between merchant's gross profit and association's cost | 3.85 |
| Total savings | \$17.35 |

The great advantage of handing the selling of one's cotton over to the Cooperative is that the grower gets what his cotton is really worth. The average farmer does not know to what grade his cotton belongs or what he should get for it. An instance cited by the Southern Ruralist is that of a Texas farmer who had half of his land in the Acala variety, which produced 1 1/16-inch staple and the balance in Half-and-Half, yielding ¾-inch staple. While the longer staple cotton was worth at least six cents more a pound, the grower actually received no more for it. Yet, when this farmer's 1 1/16-inch

cotton reached the cotton mill, the spinner undoubtedly paid a premium for it. Today, the South Carolina Cotton Growers' Cooperative Association is selling its members' 1 1/16-inch cotton at three cents premium above ¾ staple per pound, while ordinary ¾-inch staple is bringing 20.25 cents. When such facts as these are presented to a farmer, it is hard to see how he can stay out of the Cooperative, especially as the South Carolina Association has now modified its contract. Under the new contract, a grower may either have the Association sell his cotton of ¾-inch or over, at the basic price quoted on any day he may select; he may receive 65 per cent of the value of his cotton and sell at the average price for any month selected; he may receive a 65 per cent advance and the average of the season's sales, or he may delay his choice of method of payment and still receive his 65 per cent advance at time of shipment.

While rigid economy is cutting operating costs of the Association and its members are already profiting substantially from its work, the possibilities of future improvements are not being overlooked by the Cooperative, under the direction of General Manager Alfred Scarborough. Eventually, gins and oil mills owned by the Association will turn out standardized products, and a greater percentage of the total crop handled through the Cooperative will tend to stabilize production. Doubtless, attention also will be focussed soon on improving the grade of cotton produced, reducing production costs and finding a profitable use for by-products. With its own technical department, the Association could set its scientists to helping members with their field problems. Standard varieties of cotton, other crops and livestock would be grown, members' farm accounts would be kept for them and their costs ascertained, the machinery, implements and methods best adapted to their farms would be determined for them and their own chemists would study by-products utilization and soil problems, and, perhaps, eventually some groups of members will go so far as to pool their interests and employ a high-class business-farm manager to supervise the operation of their consolidated farms. Moreover, the competition of cheap cotton, the production of which is now being developed by Great Britain, France, Brazil and Russia, will soon force the American Cotton farmer to lower the cost and improve the quality of his cotton, and the cotton cooperatives may be depended on to lead the way.

Contract for Telephone Building at Abilene.

I. R. Timlin, company architect of the Southwestern Bell Telephone Company, St. Louis, wires that the general contract for a new building at Abilene, Texas, has been awarded to J. D. Johnson of Fort Worth at \$132,261; heating to Kinnison Brothers, Dallas; plumbing, S. P. Osburn, Fort Worth, and electrical wiring to the Sun Electric Company of Abilene. The building will be two stories and basement, 87 by 100 feet, of reinforced concrete and brick with stone and terra cotta trim and composition roof. With equipment it is reported to cost approximately \$700,000.

St. Louis County to Vote on \$12,750,000 Bonds.

Clayton Mo.—November 29 has been fixed by the St. Louis County Court as the date of an election on a bond issue of \$12,750,000 for additional roads, new county hospital, parks and playgrounds, new jail and additions to the courthouse. The court will also name an advisory board to consist of Charles L. Allen, E. J. Bayer and others, which will act in an advisory capacity to the county court and will supervise the expenditure of all bond monies. The St. Louis County Chamber of Commerce has been active in promoting the election on the bond issue.

What Shall the Latin-American Harvest Be?

By COURTENAY DE KALB.

Shall the harvest of relations between the United States and Latin America yield friendship or hatred?

Shall those relations promote cordial intercourse with helpful exchange of ideas and of commerce, or shall they breed discord and world entanglement?

Once we stood as a sort of sheltering angel over the peoples of Latin blood in this hemisphere. We won their instant affection and trust. The only reason why we did not then further cultivate those intimate relations that flow from commercial intercourse was that we were so occupied with the subjugation to industry of the vast expanse of the Mississippi Valley, and later of the Great West, that we had neither time nor men to spare. In a commercial sense we turned Latin America over to England and Germany. The Englishman secured a solid and firm grasp, with his understanding of the minutest details of the mechanism of foreign trade. He knew that trade, to last, must become reciprocal. It must be an exchange. At no time in the past history of our attempts at commerce with Spanish America have American exporters shown a comprehension of that fundamental principle. Essentially the Spanish American bought from us mainly the goods that were of the order of Yankee notions, clever enough to sell and chiefly non-competitive. The Spanish American was often besieged by the American salesman, but he seldom met an American purchasing agent. England, on the contrary, was solicitous to balance the ledger, without which no commerce long can survive. The flow of commerce was maintained in both directions, which was necessitated in the interest of a healthy merchant marine. It was as needful for England that her ships should be profitable carriers in both directions as it was that her raw materials should steadily arrive and be turned into articles of world trade for outward voyages. England depended on foreign commerce for her existence, but we were seeking merely to get rid of a surplus.

Notwithstanding these things, Latin America still regarded us as her bulwark of defense. She remembered the episode of the British expedition to the Argentine under General Whitelock. Had it proved successful the whole course of our own history would have been greatly modified. She also reflected upon the incident of England's expansion of a license to cut mahogany on the coast of Belize into colonial possession, and her subsequent appropriation of the great province of Vera Paz from Guatemala, which was incorporated into British Honduras. Likewise, the incident of the attempted capture of the great Bay of Fonseca, commanding the Pacific outlet of Nicaragua, Honduras and Salvador, followed some decades later by the effort to enlarge British Guiana by the annexation of a vast territory from Venezuela, both which aggressive threats were defeated by American insistence upon the Monroe Doctrine, in its only correct meaning, gave to our Southern neighbors a confidence in our spirit of brotherhood and justice that would have made possible the closest rapprochement had we not set out upon a policy of imperialism on our own account.

Recent events in Nicaragua have raised so great a storm of protest not only in Latin America and Europe, but also among justice-loving citizens of the United States, that "Current History" converted its September issue into a symposium on the United States policy toward Latin America, which demonstrates that the imperialists are very far from having things their own way, so far as public opinion goes, and it is public opinion in the end that controls our policies. Fortunately, both sides of the case are fairly presented. As many

Latin-American views are expressed as those from the United States. Among the latter there is a great preponderance of criticism of our recent imperialistic acts, several helpful statements that are not polemical, and none that are as frankly imperialistic as many of the utterances of various American statesmen that are freely quoted as an indictment of our policies of the last 50 years.

Among all the contributors to this informative discussion, only one approaches the problem with constructive vision. That is Irving T. Bush, who asks in his title: "Shall We Form a League of American Nations?"

There was an overflow of so-called "Pan-Americanism" in the days of Secretary Blaine. It is fair to admit that he meant well, but he never rose above the conception of tutelage. His point of view was that of the local autocrat in the little red schoolhouse. He developed a beautiful scheme of reciprocity with a club, but it was beautiful in the eyes of the Anglo Saxon only, not in those of the Latin American. There was no brotherhood in it. Thinly veiled behind it lay the notion that the Latin American was created for the ultimate benefit of North American commerce. Mr. Irving T. Bush laughs ironically at what he aptly terms "pan-bunk." He asks, "Isn't it about time to lay the 'Big Stick' on such a doorstep and give Uncle Sam's wrist a rest?" Continuing he declares that "Pan-Latinism will not get the Latin-Americans anywhere, and mandates will not get us anywhere. What is needed is just human friendliness and common sense understanding. We should show them our best side, and look for theirs. We should get the representatives of all the Americas around the same conference table, and we should not complain if we do not always get the best of it. The best thing for us may be to get the worse end a few times. We can afford it, and they will like us better if we are 'good sports' and take the bitter with the sweet." That is sound doctrine. Suppose we had not suffered the return of the Chamorro-Diaz combination in Nicaragua, but, with the kind of friendliness that Mr. Bush proclaims, had made a naval demonstration when Chamorro assumed authority and protected the man who had been elected under our supervision of the balloting. The scandalous junta that sought subversion of justice would have left the country to continue in the path of peace. At one stroke we would have preserved the independence of Nicaragua and have won the good-will of the great majority of the Nicaraguan people. We would have demonstrated to all Latin America that we were not co-operating with grafters, lenders of money and concession hunters, but were interested in the maintenance of free institutions as personified by a Government honestly elected. As the election of Solórzano was accomplished under supervision of our marines, and as he was duly recognized as the legitimately elected President, we would cast reflections upon our own rectitude to aver that he was illegally elected. To have supported the legitimate Government would have been in line with the admirable gesture in 1925 by President Coolidge in withdrawing our marines, insisting upon maintaining the independence of the country. As Mr. Bush well says, "We cannot afford only to preach ideals; we can afford something much more rare—to practice them. Aside from every altruistic reason, enlightened self-interest should compel us to forget our power of force and remember how infinitely more potent is the power of friendship and mutual respect. Measure the advantage in dollars and cents, if you please, or by any standard you may set—the balance is on the right side of our ledger."

Urging the idea of a League of American Nations, Mr. Bush

argues for a definite plan instead of the "drifting, hit-and-miss policy of recent generations." He reminds us that we have advanced the system of arbitration, and are largely responsible for the technical acceptance of the principle throughout the world. It is particularly applicable to the smaller nations of this hemisphere. We very properly may go further in the association of the Latin Americans to insure their security as against all the world, including ourselves. We must act very differently from the course pursued in regard to the treaty between the Central American nations agreeing to refrain from recognizing accessions to power by revolutionaries, where we stood outside in a sort of tutelary grandeur, and later sanctioned a subversion of an established Central American government to the consternation of all Latin America. It is not surprising, in view of our course in Nicaragua, that Europe already is casting eyes toward Spanish America with a serious thought of espousing their cause through the League of Nations. Most of them are members of the Geneva League. They turn naturally with the question, "What are you going to do for us when our sovereignty is invaded?" That thought having been uttered becomes a challenge to us that we dare not disregard. It is not sufficient for us to say that the last state of Latin America will be worse than the first if they turn to nations across the Atlantic who were prevented from absorbing them chiefly by our intervention in accordance with the Monroe Doctrine. It is for us frankly to admit the doctrine of sovereignty as a concrete fact unaffected by the size of the country. Human equality before the law was a very slow growth, and men of power and position still seek to subvert that fundamental principle of personal right. After the experiences of recent years a thing that Latin America profoundly fears, and which would entirely prevent a union of essential interests in a League of American Nations, is our assertion of hegemony. On that basis the idea would come to nothing. Mr. Bush was likewise conscious of this peril. He affirms: "I believe a League of American Nations, conceived in the right spirit, will do great good. If it means Pan-Americanism, as that term is usually conceived—America against the world—I want none of it. If it be conceived and run in a spirit of responsibility to high American ideals and standards, I want all I can get of it."

\$800,000 Hotel Apartment for Baltimore.

Plans are being made for the erection of an apartment building at the northeast corner of St. Paul and Eager streets, Baltimore, which will represent a cost of approximately \$800,000, including site, building and equipment. The proposed structure, for which Frederic A. Fletcher, Baltimore, is preparing plans and specifications, will be fireproof, 50 by 123 feet, 12 stories, of brick construction and will contain 104 apartments ranging from one room and bath to six rooms and bath. There will be an entrance on St. Paul street, with a dining room in the basement to accommodate 100. Construction will be handled by the M. A. Long Company, Baltimore, the property to be vested in a joint ownership, in which the architect, builders and others will be interested.

The National Founders Association Convention.

The thirty-first annual convention of the National Founders Association will be held at the Hotel Astor, New York, on November 16 and 17. This is the great rallying point of the membership of the Association, says an announcement. Here, new plans are discussed, new friendships made, enthusiasm increased and the wisdom of the organization distilled into new advice for those in charge of the affairs of the Association. The officers of the organization hope for the largest convention ever held.

\$27,000,000 for Two Government Buildings.

Washington, D. C.—Plans of the Treasury Department, James A. Wetmore, acting supervising architect, for the erection of the proposed Commerce Department and Internal Revenue buildings here have been approved by the Public Buildings Commission. The former will be located between B, D, 14th and 15th streets and is estimated to cost \$17,000,000, while the latter will be erected between 10th, 12th, 14th and 15th streets at an estimated cost of \$10,000,000. Stone construction will be employed for both buildings and both will be of the same type of architecture, the Commerce Department building to be 1030 by 350 feet, basement, five stories to entablature with sixth story back of roof balustrade. The building for Department of Internal Revenue will be 450 by 400 feet, of the same height as the Commerce Department building. York & Sawyer of New York are architects for the Commerce Department building and Ed. H. Bennett of Chicago is consulting architect for both these structures and others to be erected under the Government building program.

The architecture of the Commerce Department and Internal Revenue Department buildings will serve as a general guide, it is thought, for other buildings which will present in time, it is hoped, an unified architectural composition. The construction of the buildings have been provided in a general building bill passed by Congress and providing for the expenditure of \$165,000,000. Of this amount, \$50,000,000 will be expended in Washington over a five-year period.

"Florida Leads in Highways," Says a Motorist.

A motorist who has motored across the continent several times, and up and down the Pacific Coast, and who always boasted of the wonderful highways of California, writes from Daytona Beach, Florida, as follows:

"I drove to Miami last week. The new highway is completed now, and it is the longest piece of smooth straight road I have ever traveled over anywhere. Florida excels in roads."

This road, which is 270 miles long, is a State highway. The writer of the letter might at the same time have pointed out that the Ocean Boulevard from Daytona Beach to St. Augustine, cutting the distance between the two points by some 20 miles, is a splendid piece of road, much of it immediately along the ocean front and giving a superb view of the breakers as they roll in.

The State highway from Jacksonville to St. Augustine is also reported as having been finished and in fine shape. This would make from Jacksonville to Miami a superb piece of road of about 370 miles, and probably not a foot of bad road in the entire distance. This is a sample of the kind of highway work Florida has been doing for a long time, and which it is now rounding out into splendid shape.

"Louisiana Sugar Is Money in Bank."

New Orleans, La., November 5—[Special.]—Louisiana sugar is rapidly becoming money in the bank. Evergreen plantation, which is the first in the State to begin operations this season, so far shows a yield of about 170 pounds of sugar to the ton of cane. This is 30 pounds more than the 12-year average, and the production of cane is nearly double the 12-year average.

The tests have been made with the new POJ canes, and the 12-year average is for the old canes, the average production of which was about 14 tons to the acre, with an average sugar yield of 140 pounds to the ton. The POJ canes may average 25 tons of cane this year.

How Brazil Has Saved \$100,000,000 to Its Coffee Growers This Year.

By THOMAS EWING DABNEY.

Brazil is turning out the heaviest coffee crop in its history, and in the face of a carryover of probably 6,000,000 bags, the price has been steadily advancing. The advance has been six cents a pound since June for spots, and although the coffee trade in this country has been fighting the advance, buying only to meet actual needs in the belief that the flurry was a temporary one, the far-sighted element is now beginning to believe the advance is stabilized and that prices will not drop.

This reversal of the usual economic trend, when a small surplus sets the price for the large volume that is actually needed for consumption, illustrates what can be done in the form of farm relief when a government seriously sets itself to the task of giving that relief, and not talking about it. For Brazil coffee is rising in the face of a shockingly high production because of the efforts of the Defense Committee.

This Defense Committee, organized by the government of Brazil, has been invested with certain powers that give it the authority to regulate the amount of coffee that may move from producing centers to seaport points. As the government of Brazil controls the railroads, it has been an easy matter to do this. The Committee, in advance of such a condition as developed this year, built enormous warehouses in which the coffee is being stored, and from which it is shipped only in volume sufficient to fill the needs of the world. And it borrowed the equivalent of \$90,000,000 to enable the financing of the coffee that is so held. Growers who need money are able to secure substantial advances on the strength of their warehouse receipts.

The government was assisted in putting the measure across because of the clear indications, from the flowering of the coffee plants, that next year's crop will be a small one. In holding the over-production of this year to meet the demands

next year when there will be an under-production, therefore, the government claims it has been developing the principle of orderly marketing along sane and logical lines.

In June of this year, when the coffee began to move from Brazil plantations to shipping points, the price of current Santos in New Orleans was 16 cents a pound. The price is now 22 cents. In June, the price for December delivery was 13¾ cents in Brazil; today, it is 21 cents. By the first set of figures, the advance has been \$8 a bag; by the second set, \$10.

It is estimated that the Brazilian producers will receive at least \$100,000,000 more for their crop than otherwise they would have received. But as a heavy market can very easily develop into a demoralized market, it is not improbable that they are receiving \$200,000,000 more than they would have done, had not the Defense Committee met the situation.

The United States is the world's largest coffee market. Of a world consumption of 22,000,000 bags, this country takes about 13,000,000.

Brazil's output this year will probably be 22,000,000 bags. There will be about 6,000,000 bags produced in other coffee sections. And that will be the measure of Brazil's carry-over, a surplus that will not carry with it the terrors of a surplus of cotton in this country, when a few bales' over-production makes the production of the entire crop a dead loss.

The present price of coffee, 22 cents, compares with the war-time peak of 32 cents, and those in the coffee trade say it is not to be considered excessive. If next year's crop is small, the gross money received by the producers during the two years will probably be about what might be expected with two normal crops.

But the big feature about the situation is that Brazil is rolling out a bumper crop without the danger of finding it has lost money in improving its production.

Georgia Finds "Advertising Pays."

Encouraging results, so far, from the national advertising of Georgia resources by the Georgia Association are reported in *The Week*, the industrial, financial and agricultural review published by the Utilities Information Committee of the State, Haag-Howell Building, Atlanta. A typical letter from a resident of Plymouth, Mass., is quoted, in part, as follows:

"We receive your Georgia Magazine and we would like to locate in Georgia. Do you have any improved farms for sale close to a good town (not too small a town), as I have two girls almost ready for high school? * * * I am a dairy farmer, have silo, two barns, large house, light and water in house. I have 103 acres within one mile of 6000 town, but must go South on account of health of wife."

Answering a series of detailed questions from a New Yorker, Secretary Abbott supplied information about Georgia, and in describing the three principal sections of the State, he said:

"In north Georgia, the winters are cold, but not severe; the summers are warm, but not hot; the principal crops are wheat, corn, oats, rye and barley, Irish and sweet potatoes, alfalfa, and clover, cotton, peaches, apples, strawberries; it is admirably adapted to livestock growing. This part of the State is surpassingly beautiful because of its mountains and valleys.

"In middle Georgia, where the soil, climate and annual average temperature are ideal, very few crops can be named that will not grow profitably in this section. It is a pasture land, therefore the center of the livestock industry; is the

section of the Georgia peach and Georgia yam, and abounds in large and small streams.

"South Georgia is the section of Georgia where 'December is as pleasant as May;' where one may work afield in his shirtsleeves practically every month in the year. Tobacco is one of the leading money crops of this section, though livestock and truck growing is rapidly advancing in this part of Georgia."

Georgia finds that "advertising pays."

International Paper Company Acquires West Virginia Plant.

Wellsburg, W. Va.—The International Paper Company, New York, has acquired through the International Securities Company the entire capital stock of the George and Sherrard Paper Company of Wellsburg, operating a plant here for the manufacture of jute paper and converting it into flour sacks. It also manufactures cement and fertilizer multi-wall bags from Kraft paper under patents licensed to it by the Bates Valve Bag Company, Chicago. With slight changes in the present equipment, the International Paper Company expects to produce 20,000,000 multi-wall bags per year. The use of these bags is said to have increased tremendously within the past two years and plans will be made to gradually increase the production of the plant to meet the demand. The plant will be operated in the name of the George and Sherrard Paper Company under direction of the purchasing company.

Extension to Bennings Station of Potomac Electric Power Company.

By ALBERT A. NORTHRUP.

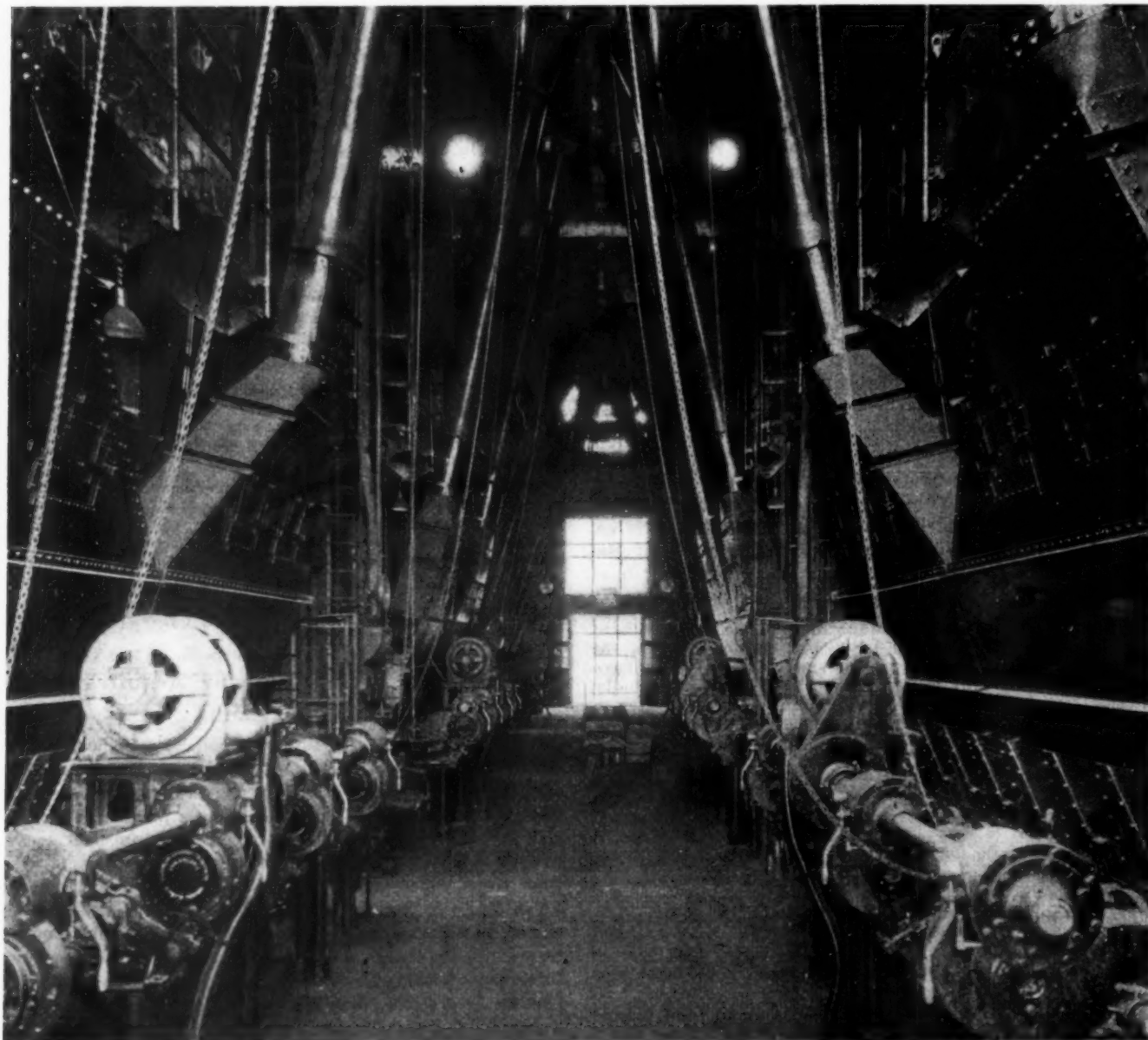
The principal generating station of the Potomac Electric Power Company at Washington, D. C., is located on the Anacostia River at Bennings Road. Prior to the installation described in this article the total installed generating capacity of this station was 120,500 kilowatts, made up of six horizontal and three vertical turbine-generator units.

The 1923 extension of this station as well as the new extension was designed and constructed by Stone & Webster, Inc., Boston, Mass., under the supervision of L. E. Sinclair, general superintendent of the Potomac company.

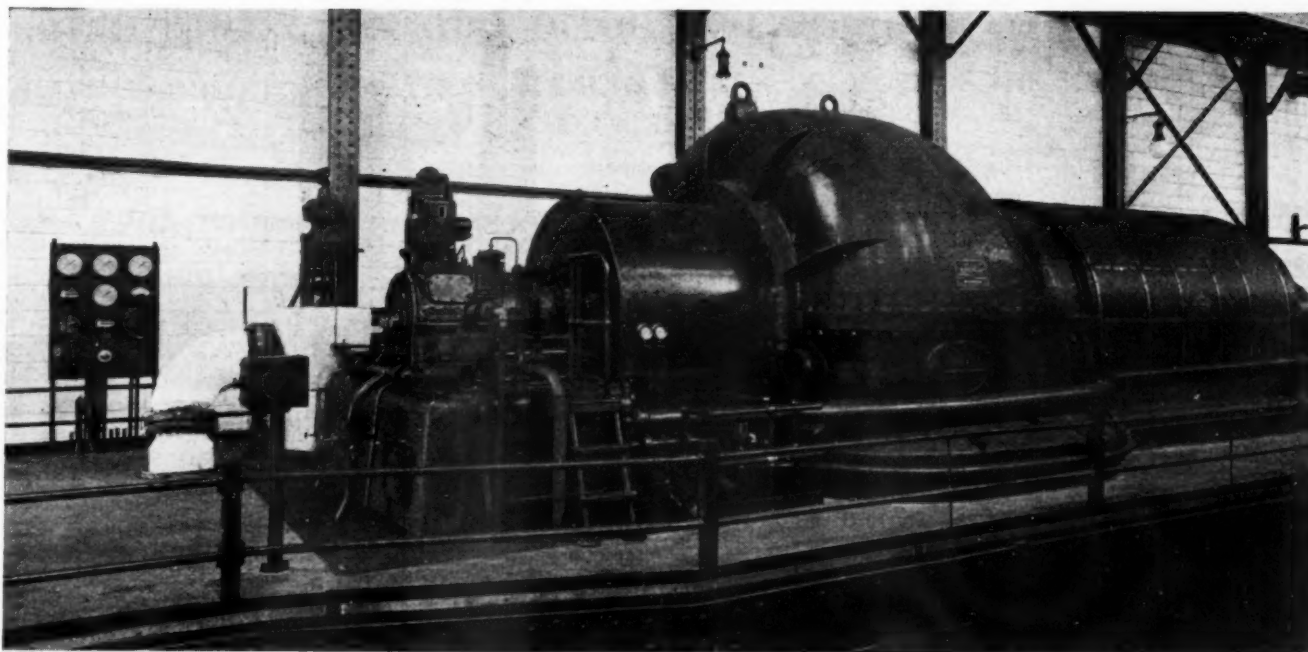
The station comprising units numbers 1 to 9 operates with a steam pressure of 190 pound gauge, and 165 degrees F. superheat. The new number 10 unit, a 30,000 kilowatt machine, marks the first step toward higher operating pres-

ures employing steam at 400 pound gauge working pressure and 700 degrees F. total temperatures. This new extension also includes four additional boilers of 1370 horsepower each, and designed for operation at the higher pressure noted above, the steam header being tied in to the other section of the station through reducing valves so that surplus steam generated in the new boilers can be utilized in the rest of the station. The design of the recent extension conforms generally in appearance to that carried out for the previous extension; the only radical change being an additional bay on the east side to house a 15,000 kilowatt frequency changer.

As the main generating units in this station consist of 25 cycle and 60 cycle machines, the installation of a frequency changer at this time permits the operation of the newer and more efficient 60 cycle machines for supplying 25 cycle cur-



BOILER FIRING ROOM AISLE, WITH THE NEW BOILERS IN FOREGROUND.



NEW 30,000-KILOWATT TURBINE GENERATOR, UNIT No. 10.

rent during low load periods when the combined 25 and 60 cycle loads will not exceed the capacity of the larger unit.

The turbine-generator, unit number 10, is designed for extraction feed water heating with bleed points from the 8th, 11th and 14th stages for heating of the condensate return to the boilers.

The four boilers installed with the new unit are provided with water cooled walls and air preheaters; this installation marking the initial use of such equipment for the station. Individual forced and induced draft fans serving each boiler are located on a mezzanine platform above the top of the boilers over the rear aisles and are driven by adjustable speed motors. The multiple point push button controls for these motors are arranged to permit the subsequent addition of automatic combustion control equipment.

The products of combustion leaving the boilers and superheaters will be reduced to a temperature of about 400 degrees F., and the combined stoker and boiler efficiency will be about 80 per cent at 300 per cent rating.

The accompanying photographs show the Bennings Station and indicate the location of this extension of the power plant.

The following list summarizes the general details and the principal equipment of the new extension together with the manufacturers or contractors who furnished or erected the various items:

Location—Bennings, D. C.
Character of Service—Base load.
Capacity—This extension 30,000 kw. 90 per cent p.f.
Boiler House (extension)—107 feet by 79 feet.
Turbine Room (extension)—45 feet by 76 feet.
Switch Room (extension)—38 feet by 76 feet.
Frequency Changer Room (new)—35 feet by 70 feet.

Principal Equipment of Bennings Plant of Potomac Electric Power Company.

Boilers—Four (4) Babcock & Wilcox Company, New York City, cross drum boilers—1370 h.p. each, 400 pound working pressure.
Superheaters—Four (4) Babcock & Wilcox interdeck type for final steam temperature of 725° F.
Boiler Setting Erection—E. B. Fouke, Washington, D. C.
Water Walls—Combustion Engineering Corporation, New York City, bare fin tube type for side and rear walls. Total heating surface 600 square feet per boiler.
Stokers—American Engineering Company (Taylor) 4 units—11 retort, 33 tuyere with double roll clinker grinders.

Ash Hoppers and Gates—American Engineering Company, Philadelphia, Pa.

Air Preheaters—Green Fuel Economizer Company, Beacon, N. Y.—Vertical tubular preheaters. Each unit with 19,970 square feet heating surface.

Forced Draft Fans—B. F. Sturtevant Company, Boston, Mass.

Induced Draft Fans—American Blower Company, Detroit, Mich.

Coal Handling Plant—Skip Hoist—R. H. Beaumont & Company, Philadelphia, Pa.

Turbine Generator—General Electric Company, Schenectady, N. Y.—3 phase, 60 cycle, 13,200 volt, 30,000 kw., 90 per cent p.f. turbine generator. Turbine provided with three bleed points for extraction heating of feed water. Generator provided with direct connected 190 kw., 250 volt exciter.

Condenser and Auxiliaries—Worthington Pump & Machinery Corporation, New York City, 40,000 s.f. two pass condenser and auxiliaries, including duplicate circulating water and hot well pumps and steam jet air pumps.

Closed Feed Water Heaters—Griscom-Russell Company, New York City, and Elliott Company, Pittsburgh, Pa.

Deaerating Heater—Elliott Company.

Boiler Feed Pumps—Two motor driven and one turbine driven Cameron centrifugal pumps; each 1000 g.p.m. at 450 pound discharge pressure.

Station Service Pumps—DeLaval Steam Turbine Company and A. S. Cameron Steam Pump Works (Ingersoll-Rand Co.), Trenton, N. J., New York City.

Main Steam Valves—Lunkenheimer Company, Cincinnati, Ohio.

Main Steam Nonreturn Valves—Schutte & Koerting Company, Philadelphia, Pa.

Auxiliary Steam Valves—Chapman Valve Manufacturing Company, Indian Orchard, Mass.

Water Valves—Chapman Valve Manufacturing Company.

Boiler Feed Line Valves—Pittsburgh Valve, Foundry & Construction Company, Pittsburgh, Pa.

Circulating Water Valves—Pittsburgh Valve, Foundry & Construction Company.

Piping—W. K. Mitchell & Co., Inc., Philadelphia, Pa.

Reducing Valves and Feed Water Regulators—Swartwout Company, Cleveland, Ohio.

Frequency Changer—General Electric Company—15,000 kw., 90 per cent p.f., synchronous induction type 13,200 volt, 60 cycle, 6900 volt, 25 cycle unit, with direct connected 63 kw., 250 volt exciter.

Station Service Transformers—Moloney Electric Company, Camden, N. J.—6—500 kw. O. I. S. C. 13,800/460 volt, single phase.

Oil Circuit Breakers—General Electric Company—H-206 cell mounted.

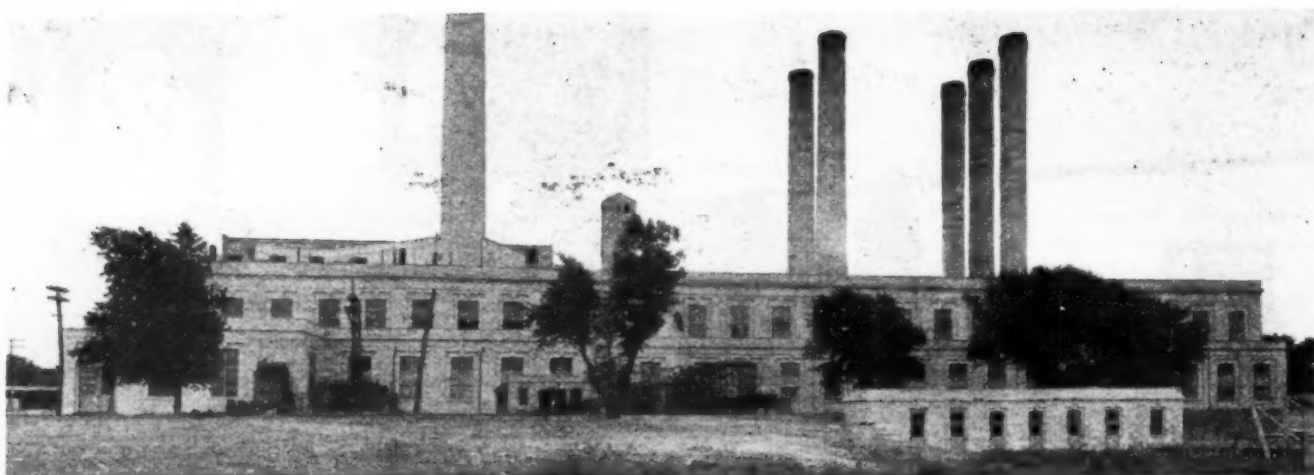
Motor Generator Exciter—Westinghouse Electric & Manufacturing Company, E. Pittsburgh, Pa.—200 kw., 250 volt.

Generator and Frequency Changer Fire Protection—Walter Kidde & Co., Inc., New York City.

Main Control Switchboard—Carleton-Mace Engineering Corporation.

Station Service Truck Type Switchboard—Westinghouse Electric & Manufacturing Company.

Bus Supports and Disconnecting Switches—Electrical Development & Machine Company, Greensburg, Pa.



BENNING STATION FROM POTOMAC RIVER; 1926 EXTENSION SHOWN AT LEFT.

Motor Control Equipment—General Electric Company.
Metal Louvers and Frames—E. Van Noorden Company, Roxbury, Mass.
Skylights and Ventilators—The G. Drouve Company, Bridgeport, Conn.
Cork Board Insulation—John R. Livezey, Baltimore, Md.
Metal Sash—McFarland-Meade Company, Philadelphia, Pa.
Air Ducts and Smoke Flues—New York Central Iron Works Company, Hagerstown, Md.

Building Steel—Jones & Laughlin Steel Corporation, Pittsburgh, Pa.
Steel Erection—R. E. Morrison, Washington, D. C.
Stairs and Walkways—Montgomery Iron & Steel Company, Philadelphia, Pa.
Concrete Block Walls—Lake Stone Company, Inc., Washington, D. C.
Excavation—Lake Stone Company, Inc., Washington, D. C.
Roofing—American Cement Tile Manufacturing Company, New York.

Houston Offers \$2,625,000 Improvement Bonds.

Houston, Texas.—The city of Houston, O. F. Holcombe, mayor, will receive bids until December 1 at the office of the city secretary, for 12 issues of 30-year serial bonds in the aggregate of \$2,625,000. All issues will be dated January 1, 1928, except an issue of \$250,000 of refunding bonds to be dated October 1, 1927. Bids will be considered on a basis of 5 per cent or less in multiples of one-fourth of 1 per cent, except the refunding bonds which will bear a fixed rate of $4\frac{1}{2}$ per cent. In addition to these, the following issues and amounts of each will be sold: Drainage and sewerage, \$750,000; farmers market, \$400,000; bayou improvement, \$250,000; civic center, \$250,000; street improvement, \$200,000; sanitary sewer, \$100,000; gravel, \$100,000; fire and police stations, \$100,000; incinerator, \$100,000; alarm system, \$75,000; hospital, \$50,000.

Contract for \$200,000 Hospital Unit.

New Orleans, La.—General contract for the erection of the proposed \$200,000 James M. Batchelor Building for doctors has been awarded to Thomas H. Brockman of this city by the Presbyterian Hospital of New Orleans, Robert P. Hyams, chairman of the building committee. This structure, the first unit of a \$2,000,000 building program planned for the hospital, will be five stories, fireproof, Northern Spanish type of architecture, of steel and brick construction with limestone trim, pile foundation and composition roof. Rathbone De Buys of New Orleans is the architect.

\$350,000 Salvation Army Building.

Washington, D. C.—At a meeting of the advisory board of the Salvation Army here, plans were approved for the erection of a \$350,000 building at 119 Pennsylvania avenue northwest, to replace the Reliance Hotel, which is now occupied by the Army as a branch of its service. It is announced by Capt. Ernest R. Holz, divisional commander of the Army, that most of the Army's activities will be centered in the new building. Funds for the building are expected to be raised in January.

Fertilizer Representatives Discuss Business.

Two much discussed public questions—control of crop surpluses to prevent a bumper crop from bumping the farmer into bankruptcy, and the Federal Trade Commission's policy toward business—were considered during the annual Southern convention of the National Fertilizer Association, at Atlanta last week. Fertilizer manufacturers and agricultural workers from 25 States were estimated by Charles J. Brand, executive secretary and treasurer of the Association, to have been present.

The McNary-Haugen Farm Aid bill, which was passed early in the year by the Sixty-ninth Congress and vetoed by President Coolidge, was explained by Dr. B. W. Kilgore, Raleigh, N. C., chairman, board of trustees of the American Cotton Growers Exchange, his topic being "Stabilized Agriculture—the Hope of Allied Industries." Information concerning the Federal Trade Commission's recently announced policy of "helping industry help itself" was given by Abram F. Myers, lawyer member of the commission. During the year, members of the fertilizer industry handling over 85 per cent of the annual sale of fertilizer have subscribed to a code of trade practice.

Eugene Talmadge, commissioner of agriculture of Georgia, spoke on "The Place of Fertilizer in a Progressive Farm Program," and other speakers were E. L. Robins, Meridian, Miss., president of the National Fertilizer Association; former Senator Christie Benet, Columbia, S. C., general counsel to the Interstate Cotton Seed Crushers' Association; J. C. Pridmore, Atlanta, director, Southern division, Soil Improvement Committee; J. N. Harper, Atlanta, co-director, agricultural service bureau, N. V. Potash Export My.; H. R. Smalley, Washington, director, Northern division, Soil Improvement Committee, and Charles J. Brand.

The Soil Improvement Committee held a preliminary meeting, and also a report was made by a sub-committee on a proposal to help the fertilizer manufacturers "see themselves as others see them" by means of a comprehensive consumer survey among farmers in 30 States. No elections were held at this convention, these being held during the regular national convention each spring.

Manifold Uses of Cottonseed and Its By-Products.

MILLIONS ADDED TO THE NATION'S WEALTH BY DEVELOPMENT OF THE SOUTH'S COTTON-SEED OIL INDUSTRY.

By HAROLD C. BOOKER, Interstate Cottonseed Crushers' Association, Columbia, S. C.

Addressing the Interstate Cottonseed Crushers' Association at its fourth annual Convention at Old Point Comfort, Va., on June 15, 1900, the late D. A. Tompkins, of Charlotte, N. C., said:

"The intensive system of agriculture is responsible for wonderful strides in that competition. By skillful and scientific manipulation an acre of ground is now made to yield three times the product of former years. The same intensive idea in steam engineering has made it possible to produce from a ton of coal three times as much power as formerly. The same intensive idea can easily wrench from a ton of cottonseed three times the present values."

The value of the cotton seed crop of 1899, the previous year, was estimated by Mr. Tompkins as having been \$60,000,000, an average value per ton of \$15.

Telling the crushers that "how to go forward is the problem we must all keep before us," Mr. Tompkins declared that "the greatest step towards increasing the profits lies, of course, in continuing the processes to greater refinements and diversifying the products, making a more finished article for the market."

D. A. Tompkins was a pioneer in the cottonseed oil mill industry. Richard H. Edmonds, editor of the MANUFACTURERS RECORD, says Mr. Tompkins once told him that when a student at college he heard an address by General E. B. Alexander, one of the last of the great Confederate generals to pass away, in which he touched on the possibilities inherent in cotton seed. That so stimulated his thought that after graduating at Troy, spending some years with John Fritz at Bethlehem and going to Germany to build a plant there for American inventors, Mr. Tompkins returned to Carolina determined to devote much of his life to the cottonseed industry and other industrial activities. His record as a builder and engineer in the oil mill industry is known to all.

If Mr. Tompkins were alive today he would see that his early belief in the future possibilities of the cottonseed, had been well founded. From August 1, 1926, to July 31, 1927, a total of 6,301,911 tons of cottonseed were crushed from which were produced 1,886,836,168 pounds of crude oil; 2,838,104 tons of cake and meal; 1,852,408 tons of hulls; 3,560,705 barrels of refined oil and 1,037,084 bales of linters of 500 pounds each. Agricultural leaders assert that \$500,000,000 is a conservative estimate of the value of the cottonseed's annual contribution to the national welfare.

What has increased the value of the cottonseed crop from \$60,000,000 in 1889-1900 to where it is estimated to contribute \$500,000,000 to the national welfare today? What uses have the oil millers and the refiners, through their chemists, found for the seed and its by-products?

First of all, the once-despised linters are now being used for batting, wadding, stuffing material for pads, cushions, comforts, horse collars, mattresses and upholstery, absorbent cotton, mixing with shoddy, mixing with wool in hat-making, mixing with lamb's wool for fleece-lined underwear, felt, low-grade yarns, lamp and candle wicks, twine, rope, carpets, cellulose, writing paper, gun cotton, nitrocellulose or pyrocellulose, cellulose acetate, lacquers, smokeless powder, pyroxylin, varnishes, coating for metals, artificial leather and waterproofing, plastics, celluloid, collodion, artificial silk and photographic films.

Then hulls are used for feed, fertilizer, fuel, potash, packing, household utensils, bran-cotton feed, furfural, adhesive and fibre for stuffing horse collars, basis for explosives—dyna-

mite, cellulose, paper, stock-pressed paper products and blotting paper.

From the kernels of the seed come the cake and meal and crude oil. The cake and meal are used in feed for cattle, poultry, horses and mules, swine and sheep; flour for bread, cake and cracker, and for fertilizer. The crude oil is put to many uses. The refined product is used in prime summer yellow oil, cosmetics, bleached or deodorized oil in lard compound, cooking oil and salad oil; hydrogenated oil in lard substitutes and lard compound; cold pressed oil and winter oil in salad oil, setting olives, packing sardines, winter white oil; stearin-margarin; emulsion for medicinal purposes, substitute for sweet oil, deodorized oil. The off-grade summer yellow oil is used in making soap, miners' oil and hydrogenated oil in soap. The crude oil is used in making putty, foots in washing powder, acidulated foots or black grease in glycerine-nitroglycerine; fatty acids in candle pitch and distilled fatty acids, stearic acid-candles, washing powder, soap, stearin pitch or cotton-oil pitch, oleic pitch in soap, fulling ware, roofing tar, composition roofing, insulating materials, waterproofing, cheap-paint base, cotton rubber, artificial leather for upholstering and book-binding, phonographic records.

What of the possibilities for the future? Just as Mr. Tompkins asserted in 1900 that the value of seed could be tripled by skillful and scientific manipulation, which has been done, so is the assertion now being made by agricultural authorities that eventually the cotton seed will become worth \$1,000,000,000 to the nation, because, as Dr. A. M. Soule expresses it, "we are a long way yet from appreciating or utilizing its latent possibilities as the great God who created it intended."

The Interstate Cotton Seed Crushers' Association and its members have been intensively developing new uses for cottonseed and its by-products since its organization in 1897. Today it has a foremost chemist, Dr. E. P. Clark, actively engaged in a definite program of basic research which it is hoped will result in the discovery of new and very important uses. There are many who think that undiscovered possibilities are as great as the discovered.

The whole South has profited by the work of the oil miller and refiner. Especially is this true of the cotton farmer. The benefit which was going to accrue to the farmer was clearly foreseen by Mr. Tompkins, and in his speech in 1900 he said: "I conceive that no men are deserving more credit in the South than the oil men. They work for and benefit the farmer." Again in this same speech: "No one set of people have done more for the farmer than you have." And again: "All manufactures are advantageous to the farmer, but the development of the cotton oil business has been most advantageous, and these advantages have been more generally dispersed over the whole South and reached farther into the country."

Associate Architects for \$400,000 Courthouse.

Greenville, Texas.—The board of commissioners of Hunt county has selected Page Brothers of Austin, Texas, as associate architects for the new \$400,000 courthouse and jail building to be erected here. As previously announced, the building will be of steel, brick and concrete construction and will probably be five or six stories high. W. R. Ragsdale of this city is the architect.

Farming With Machinery in the South.

TRACTORS USED FOR PULLING PLOWS, HARROWS, ETC., FOR OPERATING THRESHERS, BINDERS, BALERS AND OTHER FARM EQUIPMENT.

By EDWIN A. HUNGER.

An average of 128 bushels of oats to the acre is the record made last year in a four-acre field by J. Wade Drake, a farmer who uses tractors, in Anderson county, South Carolina. S. M. Byars, county agent, made a careful check of the yield from this plot and reports that the total production for the four acres was 515 bushels, and that the average weight per bushel was 39 pounds. That this was a world's record is disputed, one man claiming in the Columbia (S. C.) State that in 1882 Col. John D. Wylie had made a yield of 209 commercial bushels of oats to the acre on a 3½-acre plot in Lancaster county, South Carolina.

In an accompanying illustration James Drake, nephew of J. Wade Drake, is at the wheel of a tractor which is



TRACTOR PULLING SUBSOIL PLOW.

pulling a sub-soil plow. The field had just been limed in preparation for a seeding of alfalfa. Previous to the oats it had been in cotton, which was followed by a cover crop of vetch and rye. The field was planted in oats about October 1 last, four bushels to the acre, and the soil was treated with 400 pounds of 10-4-4 fertilizer to the acre and 200 pounds of nitrate of soda per acre. The seed was drilled in rows 17 inches apart. The farm, owned and operated by Mr. Drake, is 425 acres in size, of which 225 acres are in cultivation. Last year he had 100 acres in cotton, 30 acres in corn and 75 acres in small grain, chiefly oats.

Mr. Drake is an enthusiastic user of farm machinery. He practices the employment of plenty of tractor power to carry on his farm operations. He owns two three-plow, 15-30 McCormick-Deering tractors, for a variety of heavy jobs and also such outside work as road building, threshing and saw-mill operation. He said that if he had to do without tractors he would seriously consider changing his occupation. Much of his land is hilly, but he says there is no trouble working the tractors on these hills. He plows and disk-harrows all his land by means of tractors, even that for cotton, which is cared for by six negro tenants, each of whom looks after 12 acres of cotton and 2 acres of corn and gets one-third of the crop raised on this acreage.

It was especially emphasized by Mr. Drake that lots of power—the kind provided by his tractors—is needed to turn under cover crops. He said he never misses an opportunity to put his land in such crops, and when one considers the fact that he has been averaging 75 bushels to the acre in oats for the past five years and has been getting 60 bushels of corn and up to 1000 pounds of high-grade cotton to the acre there is little doubt that this procedure pays. Rye and vetch form his usual cover crop, although he also plants

some winter crimson clover in his corn land. He even goes so far sometimes as to plant two cover crops in a single year. He limes his soil very frequently, to get the most out of the cover crop. Another method of maintaining his high yields is by careful rotation of his crops. He also enriches his land by planting Biloxi soy beans in with corn. He is in the habit of drilling corn in rows five feet apart and in cultivating it he makes use of riding cultivators, usually giving the corn four cultivations, one every 10 days.

The disk harrow and culti-packer, pulled by a tractor, are a very effective combination in providing the proper tilth for his crops, says Mr. Drake, and he uses it wherever possible. In breaking ground with three-bottom plow and tractor, he can cover an acre an hour with either tractor, or 10 acres in a 10-hour day, and thus is able to plant his crops at times when it is most advantageous to do so. Plowing is not the long drawn-out affair that it is for so many Southern farmers who must depend on horse-drawn plows.

Mr. Drake also has to harvest his small-grain crop, a 10-foot McCormick-Deering tractor-binder, the power for operating the machine coming from the tractor engine by a power take-off, instead of from the bull wheel. This binder and tractor form a one-man outfit, and it is claimed that with it a single operator can harvest as much grain in a day as two men can with eight-foot horse-drawn binders. The fact that power comes directly from the tractor means more positive, steadier action. Mr. Drake also owns his thresher and, besides threshing his own small grain, does a large amount of custom work. Last year he threshed 3700 bushels of grain for himself and about 41,000 bushels for some 100 neighboring farmers. In the winter he finds it profitable to operate his portable sawmill outfit with one of the tractors. Each year in this way he produces from 200,000 to 300,000 feet of lumber. The stumps are blown loose with dynamite and he then uses a tractor to clear them away and last year he cleared 30 acres. The tractors are also profitably employed in making terraces and ditches, sawing wood and road building.

Mr. Drake has also won considerable renown in the South



HAY-BALER AND TRACTOR AT WORK.

for the type of high-grade cottonseed which he produces, and requests for his Drake-Cleveland special seed, as it is called, come from as far west as Texas. He ships oats for seed purposes, also, to every State in the South; he grows the Fulghum variety.

On the whole, Mr. Drake seems to represent what is coming to be "the new South." Efficiency is his policy and practice. The use of labor-saving machines and tractor power has enabled him to cut his production costs and to increase his

earning power by doing much outside, or custom, work. A common-sense rotation program, extensive planting of cover crops, proper use of lime and fertilizer, thorough and timely tillage and cultivation and careful seed selection have made it possible for him to increase his yields. Lowered production costs and increased output per acre, of course, have meant greatly increased earning power for his efforts.

Another farm which has benefited by the use of machinery also may be considered. When S. P. Hutto went to South Carolina 10 years ago he had one mule with which he farmed 20 acres that he rented. Now he and his brother, F. O. Hutto, who joined him later, own and operate a farm of 500 acres near Cameron, S. C., 300 acres of which are in cultivation. They operate this farm with a complete assortment of labor-saving machinery, including tractor and such modern-day tractor-operated units as thresher, hay baler and 10-foot power-drive binder. Through their efforts in these 10 years, also, they have built up a high financial rating.

When the boll weevil became a serious menace to cotton growers, some years ago, the Hutto brothers decided it



TRACTOR-OPERATED PORTABLE SAWMILL.

would be better for them to concentrate on the growing of other major crops and mapped out for themselves a real program of diversification, including the feeding of a number of hogs and cattle. In this program they had last year 140 acres in oats, which were followed by cow peas; 105 acres in corn, several acres in potatoes and various truck crops and only 30 acres in cotton. They also raised and fed 100 Poland-China hogs, fed 12 head of meat cattle and kept a milk cow for family use.

Cotton growing, S. P. Hutto declares, is only a side line with them, and since it is such they are not bothered with many of the problems that are vexing so many farmers whose principal crop is cotton. For one thing, they are not slaves to the negro tenant system, the negroes who work for them being on a hired-hand basis, getting a certain wage each month and "keep." A carefully worked out rotation plan helps to maintain soil fertility. The money-paying hogs and meat cattle enable them to add to their profits by utilizing odds and ends that otherwise would be wasted.

The Hutto brothers have been tractor farmers for five years. They own a McCormick-Deering 10-20 tractor, with which they do their plowing and disking, and operate their own 10-foot tractor binder and hay baler and New Racine 20 by 32 thresher. They also put the tractor to good use at sawing wood. Another useful machine that they own is a Meadows mill operated by a six-horsepower International engine. They use nine mules and one horse and regularly employ 10 negroes. Without the tractor, they said, they would have to have at least six more mules and five more negroes. With the tractor, moreover, they declare, they can do things that would be impossible with mule power. The tractor especially enables them to do better tillage. The hay baler is a specially profitable machine; it is shown connected by belt to the tractor and baling cow pea hay. The cow peas followed the oats, which were harvested May 1,

and in the form of hay averaged one ton to the acre. The baler was also used to bale oat straw. Last year the brothers sold two carloads of straw and five carloads of cow pea hay, in addition to that which they kept for their livestock. They also sold a carload of shelled corn and a carload of peas. They have been averaging 35 to 50 bushels of oats, 35 to 40 bushels of corn and 500 to 600 pounds of cotton to the acre.

As evidenced on the Drake farm, the use of portable tractor sawmill outfits is extending in the South. There are numerous small forest areas in which portable sawmills, operated by kerosene tractors, are profitably employed to produce lumber at low cost. Because of the ability of the operator to move easily from place to place—the tractor providing power for moving the outfit, as well as for operating it—tractor-operated sawmills are especially well suited for such work. Frequently, farmers who own tractors are able to add to their income in off seasons, both in their own wood lots and for neighbors. In South Carolina, quite a number of these outfits are in use. Since almost 8,500,000 acres—out of a total area for the State of over 19,500,000 acres—are classed as wooded, there is quite a field for these operations.

In the accompanying illustration is shown a tractor-operated sawmill owned by J. M. Sikes of St. Matthews, S. C., who averages 150,000 feet of lumber a month and in a period of nine months he made 15 moves. It takes three men to run the outfit. They are paid \$2 a day, making a total daily labor cost of \$6. It takes 20 gallons of kerosene and 3 quarts of oil to operate for a 10-hour day. Long-leaf pine composes most of the timber sawed by Mr. Sikes, and 60 per cent of his finished output is in 12-inch by 12-inch sizes. Other sizes vary from 1 inch by 4 inches to 14 inches by 16 inches. He said the tractor more than paid for itself in the nine months of operation.

For the clearing of palmetto thickets, which have greatly hindered development of land in the South, the tractor and a special brush-breaking plow form an efficient labor and time-saving combination. With this power outfit, 1½ acres of land completely infested with palmettos can, it is stated, be cleared in a day at a cost of \$18, which includes an allowance of \$1.80 a day for depreciation. It would take six men



TRACTOR AND PLOW CLEANING AWAY PALMETTOS.

(five negroes and a white foreman) 30 days to clear the same area at a cost of from \$135 to \$225.

In the accompanying illustration is shown a 15-30 tractor hitched to a No. 458 tractor brush breaker, as it is called. Miss Lucile Bruce, a prominent realtor of Brunswick, Ga., is at the tractor wheel, breaking land on the farm of Col. R. E. Benedict, near Brunswick, that has not been cultivated since the Civil War. This land will be devoted to truck gardening. The brush breaker is a special, practically all-steel, heavily built, 20-inch, single bottom plow, equipped with an efficient power-lift device of the chainless type, operated by a single trip rope convenient to the tractor operator. A 33-

inch rolling coulter, designed especially for cutting the long, heavy palmetto roofs, is an important part of this tractor plow outfit.

A feature of a farm machinery demonstration recently held on the Clemson College farm in South Carolina was the work of a Farmall tractor and mower on a steep slope, cutting tall Johnson grass. An idea of the difficult going encountered by this tractor mowing outfit can be had by viewing the illus-



TRACTOR AND MOWER WORKING ON A HILLSIDE.

tration. A specially designed, seven-foot mower is used with the machine, power for operating the cutter bar coming from the tractor engine by a power take off. One man with this outfit can, it is claimed, cut 25 to 30 acres a day, replacing two to three men and four to six mules. Steering is very easy. In making short turns, a brake works automatically on the inside rear wheel and the tractor then turns on that wheel as a pivot, the turning radius being only eight feet.

Development of Mechanical Power Generating Machinery.

The rapid growth from year to year of the National Exposition of Power and Mechanical Engineering is thought to be an accurate measure of tremendous advances in the development of mechanical power generating and using machinery. As previously announced, the Sixth National Exposition of Power and Mechanical Engineering will be held at the Grand Central Palace, New York, from December 5 to 10, inclusive, coincident with the big annual meetings of the American Society of Mechanical Engineers and the American Society of Refrigerating Engineers. More than 500 exhibitors are expected to participate in the Exposition and it is expected that four floors of the Palace will be completely filled with interesting showings of the latest mechanical devices. Managers of the Exposition are Fred W. Payne and Charles F. Roth, who may be addressed at the International Exposition Company, Grand Central Palace. In the planning and conduct of the Exposition, the management is aided by an advisory committee, of which I. E. Moulthrop of the Edison Electric Illuminating Company, Boston, Mass., is chairman.

31-Story Building for San Antonio.

The McKenzie Construction Company of San Antonio, Texas, wires that it has contract to erect a 31-story office building for the Smith Brothers Properties, Inc., of that city, in the Bowens Island development of San Antonio, and that actual work is expected to be started about January 1. The structure will be fireproof, but details have not been determined as plans and specifications have not been completed. Atlee B. & Robert M. Ayres of San Antonio are the architects.

INITIAL CONTRACTS ON \$7,000,000 TENNESSEE RAYON PLANT.

American Glanzstoff Corporation Selects Foundation Contractor and Firm to Furnish Steel.

Dr. A. Mothwurf, president of the American Glanzstoff Corporation, which has projected a big plant in Happy Valley near Elizabethton, Tenn., for the manufacture of commercial rayon or imitation silk, wires that the foundation contract for the first unit of the plant has been awarded to the Hughes-Foulkrod Company of Philadelphia, Pa., and contract for approximately 2900 tons of steel to the McClintic-Marshall Company of Pittsburgh, Pa. As reported a few weeks ago, contracts for excavation were awarded to B. G. Young of Johnson City, and the Dempster Construction Company of Knoxville. It is understood that the company will expend \$7,000,000 initially and employ 4000 operatives. Lockwood, Greene & Co., New York, are the engineers.

Ultimate plans contemplate the construction of a number of additional units which will eventually involve the expenditure of about \$50,000,000 and call for the employment of 20,000 people. Officers of the corporation, which is capitalized at \$37,000,000, include in addition to Dr. Mothwurf, B. C. Dunlop, vice-president and secretary, and A. Hunziker, assistant secretary, both of New York. The company is a subsidiary of the Glanzstoff Fabriken Corporation of Germany.

To meet the housing needs of their workmen, the American Glanzstoff Corporation, American Bemberg Corporation and the Watauga Land Development Corporation, in co-operation with Washington and Carter counties and the chambers of commerce of Elizabethton and Johnson City, are promoting a large community development in Happy Valley. A survey for the layout of the development is in charge of John Nolen, city planner of Cambridge, Mass., and associates. The regional plan will cover the entire territory adjacent to and between Johnson City and Elizabethton and will embrace the location of main lines of communication and the allocation of land for various purposes, as well as for a housing project to involve the immediate construction of 200 dwellings and other structures and provide for parks and playgrounds.

Texas' \$1,500,000 Turkey Crop.

Fort Worth, Texas, November 7—[Special.]—The marketing of 650,000 Texas turkeys started the past week with dealers at shipping points paying an average of 25 cents a pound for the birds. This means that Texas farmers will receive between now and Christmas more than \$1,500,000 for their turkeys. Something like 200 plants and 20,000 persons will be employed in killing, picking and otherwise preparing the fowls for market.

The price of 25 cents means that consumers in New York and Chicago will pay about 45 or 50 cents a pound for them at Thanksgiving. This is high enough to make them prohibitive in many households.

Turkeys have a double profit for the Texas farmer who produces cotton, and most of them still do, in spite of all diversification arguments. Experience has proved that the turkey is by far the best antidote for weevils and worms in cotton; and that a turkey to the acre will do away with practically all insects, enabling the cotton to thrive when neighboring fields are being ruined.

Reports from shipping points show that the Texas crop will total considerably more than last year.

Proposed Reorganization of Public Works.

A PLAN SUGGESTED BY AMERICAN ENGINEERING COUNCIL FOR CONCENTRATING IN THE INTERIOR DEPARTMENT SUCH ACTIVITIES AS FEDERAL BUILDING, RIVER AND HARBOR WORK AND PUBLIC ROADS.

With the support of Secretary Hoover of the Department of Commerce and of Secretary Work of the Department of the Interior, the American Engineering Council has adopted a new plan of executive reorganization affecting public works which, it is believed, will meet with favor in Congress and end a movement for administrative reform lasting 40 years. The Council, it is announced by its president, Dean Dexter S. Kimball of Cornell University, has recognized political expediency without sacrificing the essential principle involved in centralizing and placing on a business basis the enormous public works functions of the Federal Government, with which, in the past, it is charged, waste and inefficiency have been associated.

The proposals of the engineering profession have been embodied in a bill to be introduced at the coming session of Congress by Representative Adam M. Wyant of Pennsylvania. Adoption of the measure, according to the engineers, will mean savings annually of millions of dollars, create a modern industrial organization and constitute a great advance in accomplishing the administrative reforms begun under President Harding.

The most striking feature of the new engineering policy is the abandonment of the idea of creating a Department of Public Works to replace the historic Department of the Interior, whose structure has been repeatedly denounced as archaic and wasteful. The Department of the Interior, established during the early days of the Republic, when "Interior" applied to the region west of the Alleghenies, will, therefore, be continued. The engineers contend that they never have advocated the creation of a new Federal department. They have decided, however, that to insist on the change of name, even though no new department was contemplated, is politically unwise. They felt, Dean Kimball said, that both Congress and the Administration would be opposed to the formation of a Department of Public Works; hence, an effort in that direction would be futile.

"This attitude," it was declared in a report presented to the administrative board at York, by L. W. Wallace of Washington, executive secretary of the Council, "is no doubt in part due to the efforts being made to create three new departments; namely, Education, Health and Conservation. Although the proposed Department of Public Works did not contemplate a new department, it was undoubtedly construed as equivalent to such action. Hence, the Administration and Congress were reticent, feeling that, once the gate was partially opened, there might be an avalanche. Secretary Work is opposed to changing the name of the Department of the Interior."

Under the new scheme a major division of public works would be created in the Department of the Interior, and would be directed by an Assistant Secretary of Public Works, who shall be an engineer. This division, it was declared by Mr. Wallace, has the approval of public works functions. Secretary Hoover, the report stated, has also endorsed this plan, and both he and Secretary Work are expected to make strong speeches in behalf of its enactment into law.

One notable provision is the inclusion of rivers and harbors in the new Wyant measure, notwithstanding anticipated opposition from the engineer corps of the Army. In essence, the plan sponsored by the engineers, in accordance with the suggestions of Secretaries Hoover and Work, is stated in the report of Executive Secretary Wallace as follows:

"To establish in the Department of the Interior a major

division of public works wherein would be concentrated all of the agencies of the Federal Government concerned with public works. This includes all of the transfers contained in the Wyant bill of the last Congress and a few others suggested by the Secretary of the Interior.

"There has been omitted from the revised bill any reference as to what the internal organization shall be after the transfers are made, with the exception that the revision specifies there shall be an Assistant Secretary of Public Works, who shall be qualified by experience and training to direct work of such character.

"To include organization matters in the bill would unnecessarily add to the difficulties of securing favorable action. If the transfers are made, the character of the organization will be a departmental question which can be dealt with at the proper time.

"Upon the suggestion of the two Secretaries, the provision remains that members of the engineer corps may, upon the request of the Secretary of War and with the approval of the Secretary of the Interior, be temporarily transferred to the division of public works for training and experience.

"The revised bill is a proposal to transfer certain agencies of the Government from the departments in which they may now be to the Department of the Interior, so that a unification of planning, direction and control of public works activities may be realized."

Provision for the centralization of the public works functions of the Federal Government is contained in Section 2 of the revised Wyant bill, which makes the following transfer to the Department of the Interior:

"From the Department of Agriculture, the bureau of public roads, except the agricultural engineering division thereof.

"From the Department of the Treasury, the office of the supervising architect.

"From the Department of War, the rivers and harbors improvements, including the board of engineers on rivers and harbors, and the duties of the chief of engineers thereto appertaining; the Mississippi River Commission; the California Debris Commission, and the Alaska Telegraph and Cable system, and all other engineering and construction work of a civil character, including all jurisdiction in respect to navigable waters, except such as may pertain to his military duties.

"The board of road commissioners for Alaska, under the jurisdiction of the Department of War, is hereby abolished, and the authority, powers and duties conferred and imposed by law upon said board shall be held, exercised and performed by the Secretary of the Interior through such instrumentalities as he may determine, with the approval of the President.

"The office of public buildings and public parks of the national capital is hereby abolished, and its authority, powers and duties shall be held, exercised and performed by the Secretary of the Interior through such instrumentalities as he may determine, with the approval of the President.

"The Inland Waterways corporation is hereby transferred from the jurisdiction of the War Department to that of the Department of the Interior, and the Secretary of the Interior shall have and exercise all the powers and duties now imposed by law upon the Secretary of War in respect to said corporation.

"The Rock Creek and Potomac Parkway Commission is hereby abolished, and the authorities, powers and duties conferred and imposed by law upon said board shall be held, exercised and performed by the Secretary of the Interior through such instrumentalities as he may determine with the approval of the President.

"The Commission of Fine Arts is hereby transferred to the jurisdiction of the Department of the Interior, and the authorities, powers and duties conferred and imposed by law, executive order and otherwise upon the said commission shall remain with the commission, except that the Secretary of the Interior shall direct the efforts of the commission to conform with the public works functions of his department, with the approval of the President.

"From the jurisdiction of Congress, the office of the architect of the capital."

Section 3 of the Wyant bill relates to the engineer corps.

Its provisions, hostility to which is foreseen, though they are declared to have the approval of Secretary Work, follow:

"That engineering officers of the United States Army may be detailed by the Secretary of War to non-military duties having to do with river and harbor improvements, the Mississippi River Commission, the California Debris Commission or other civil functions, with the approval of the Secretary of the Interior.

"All officers of the United States Army attached to the Department of the Interior shall retain their military rank and succession, and receive the compensation, commutation and emoluments provided by law in the case of army officers of the same rank not detached from the Regular Army service."

The question of reorganizing the public works functions of the Government, though nearly half a century old, has been pressed continuously since April, 1919, when there met in Chicago a convention of delegates from engineering, architectural, manufacturing and business men's organizations representing 74 societies and 105,000 members. A permanent federation was organized, originally known as Engineers, Architects and Constructors Conference on National Public Works. The organization's scope soon broadened, and the name was changed to the National Public Works Department Association. Committees of the Association were formed in many cities and a nation-wide campaign was conducted to bring about appropriate legislation. A New York city committee, composed of leading engineers, architects, financiers, business men and civic leaders, was headed by Adolph Lewisohn as chairman, with J. Parke Channing, who contributed largely to the financial support of the Association, as vice-chairman. In 1920 the Federated American Engineering Societies, now known as the American Engineering Council, were organized in Washington under the presidency of Herbert Hoover, and assumed direction of the public works activities of the engineering profession.

The new plan is the culmination of all of this engineering effort in the direction of the "rationalization of Government business conduct."

The American Engineering Council's committee on Government reorganization, of which Gardner S. Williams of Ann Arbor, Mich., is chairman, is now in charge of the public works activity.

The Enormous Growth of the Candy Industry.

According to a pamphlet published by the Capitol Candy School of Washington, printed by Fleet-McGinley, Inc., of Baltimore, the retail sale of candy in the United States rose from \$650,000,000 in 1922 to \$1,200,000,000 in 1924, or an increase of nearly 100 per cent in two years. Whether the figures are absolutely correct or not, we cannot say, as the census department does not undertake to compile the volume of retail trade of this kind; but we take it for granted that the Capitol Candy School knew whereof it was writing in making this statement.

It is a well-known fact that since the adoption of the Prohibition Amendment there has been an enormous increase in candy consumption; men who formerly drank alcoholic liquors now turn freely to milk and buttermilk and to candy eating. The stomach seems to crave something in the shape of sweets found in candy and the growth of the industry is one of the romantic stories of the advancement of American business.

This catalogue, or beautifully printed circular, of the Capitol Candy School gives many details in regard to candy making.

An election will be held in Yoakum, Texas, about December 20 on a bond issue of \$250,000 for public improvements.

O. H. Cheney Inspires the Steel Industry.

Warning that the steel industry in America may have to struggle to retain its own home market against European competition was sounded by O. H. Cheney, New York banker, in an address before the recent annual meeting of the American Institute of Steel Construction at Pinehurst, N. C. Mr. Cheney, who is vice-president of the American Exchange-Irving Trust Company, discussed "the new competition between industries," which he regards as one of the significant developments in modern business conditions. First saying that in "the new inter-industrial competition" industries are fighting not only for money, but also for time and space, he explained that the competition for money is not limited to buying power, but also includes investment capital, by causing it to flow from one industry to another and "to neglect one while it bulks up another." In times of plentiful money like the present, he said, there is enough to go around; but, should there develop a feeling that there has been overbuilding of apartment houses and office buildings, it would not be so easy to get loans on such structures. He then continued:

"But, even wider and more vital than inter-industrial competition is international competition, because here we are right in the silent storms which govern the fate of nations—and sometimes, when there is war, they are not so silent. I need not tell the structural steel industry about foreign competition. It does not take a big volume of imported fabricated steel to upset prices. Buyers are ready to hear the figures of the importer and to use them with deadly effect when the domestic fabricator bids—and to use imaginary steel as well as real steel to whittle down prices. And so far the attempt of a patriotic superintendent of buildings like the one in Brooklyn, N. Y., to forbid the use of foreign beams, has not been very effective. Nor has the anti-dumping tariff law yet been of much use to this industry."

That the American steel industry has been a little too confident and self-satisfied about international competition, was Mr. Cheney's belief, and he warned that "the pressure of international competition forces more international competition." European steel producers have been aided by cheap labor, government subsidies, special railroad rates and exchange conditions, he added, and as a result English steel producers find it hard to fight continental competition; so, "they therefore join together and agree to give rebates to customers who use only British steel." When foreign producers are thus shut out of one market, will they not seek other markets? he asked, and added:

"Canada, India, Australia and Japan are building up their own steel production and the world market for steel is narrowing in area, even if the potential volume may be increasing. Will not the competition for the few remaining markets become more intense? Our American steel leaders have been reassuring us that we have nothing to fear from the Continental Steel Entente—that the cartels know that the American steel industry is not to be trifled with. But, so far, the cartels, even by stringent fine systems, have been unable to keep down production in some countries—and a desperate man will dare anything."

After sketching the effects of international and inter-industrial competition on the steel industry, Mr. Cheney showed that it was equally affected by "the other types of the new competition—by inter-distributor and inter-commodity competition." This he pictured in detail and referred to sentiment in the United States Chamber of Commerce committee on trade relations, which "feels that the only way in which business can regulate itself and in which any industry can work out its internal problems is by joint action of all the factors in the industry—by joint committees representing producers, middlemen and final distributors."

"Your organization has gone far in the few years it has existed—further than many trade associations with longer histories—but, you have still far to go," said Mr. Cheney, and emphasized that "the ideas which I do not wish to leave with you are that I think volume of business the cure for your troubles or that I think that merely having your associa-

tion will solve your problems." American business in general, he said, "has gone volume crazy;" but, "a growing proportion of businesses are not making any money and the profits of those which are are decreasing." The policy of the steel industry in going after new markets, as well as protecting the old, he considered an almost sensational contrast to the traditional methods of the steel industry.

"Until now," as he put it, "anybody who wanted to give the steel industry new business had to hit it over the head to wake it up. Your realization of the need of research is promising—and so is your work for uniform building codes and more scientific specifications—and so is your educational work. But, I should like to warn you that many trade associations are little more than once-in-a-while golf clubs, because their members take it for granted that, if they have an association and pay dues, that is all there is to it. Your plans for raising your industry out of the excavation are splendid. Back them up with money to the limit of your ability—but, do not think that is all that is demanded of you. Every one of you must put himself into the plans if they are to come out right. Each activity of your association must be energized by the activity of each company. A trade association is not a good alibi for quitting work."

\$23,900,000 Bond Issue Proposed for Dallas— Would Continue Program of Major Improvements.

Dallas, Texas.—Taking a little more than two years for its investigations, the citizen's advisory finance committee, of which C. E. Ulrickson is chairman, has submitted a report to the Mayor and City Council recommending a bond issue of \$23,900,000 to finance a continuing program of major improvements which has been undertaken by the city. If the program is adopted by a vote of the people, it is said the entire amount of bonds would not be issued at once, but over a period of nine years. This would make the average \$2,655,555 per annum, although a recommendation by the committee limits the issuance to any one year from \$1,000,000 to \$3,000,000, with a stipulation that not more than \$4,000,000 of the bond money may be expended in any one year.

A tentative schedule of improvements for which the proposed bond issue will be used include the following with amounts assigned: New school buildings and improvements, \$1,900,000; street construction and underpasses, \$5,500,000; parks and connecting boulevards, \$1,500,000; sanitary sewer system extensions and improvements, \$1,000,000; storm water drainage, \$3,500,000, which is city's portion of an \$8,500,000 program; city's share of street paving, \$3,000,000; new central fire station and improvements, \$350,000; incinerators, \$150,000; libraries, additions and equipment, \$500,000; building and equipment for Institute of Fine Arts, \$500,000; downtown municipal auditorium and equipment, \$1,000,000; municipal airport, \$400,000; additions to Parkland Hospital and other city-county units, \$400,000; extension of water system, including enlargement of pumping facilities and purification plants, \$4,000,000; working staff, including engineering and legal services, \$200,000.

Wages in the United States, 1914-1926.

The National Industrial Conference Board has issued a summary of results of studies of trends in Wages, Hours of Work and Employment for male and female workers in the important occupational fields during the past 10 years, showing the relation of the wage situation to other business and industrial conditions during 1926. It is based on an analysis of returns from about 1700 industrial plants from all parts of the country.

First Annual Convention of South Texas Chamber of Commerce.

By WILLIAM S. WEST, General Chairman of the Convention.

Progress made after a year of intensive effort toward the solution of the major problems of business and industry of South Texas—a year which has been a test of the regional chamber of commerce—will be reviewed at the first annual convention of the South Texas Chamber of Commerce, in Brownsville, November 14 and 15. As president of the organization, R. W. Morrison of San Antonio will detail the active fight which the chamber has led in seeking to bring about legislation and co-ordinated movements to lay foundations for the development on a sound basis of the great territory included in South Texas.

Great enthusiasm over the meeting indicates heavy attendance and large delegations are expected from all parts of Texas. Also, the Southern Pacific Railway decided that it would hold a celebration at the time and, as part of the demonstration of the progress of this region, the railroad's celebration will attract many. It has been worked into the convention program.

The program provides for ample discussion of all phases of civic and industrial life of the region. The Governor of Texas and the Governors of two Mexican States are expected, other officials have been invited, and all parts of Texas will be represented by regional commercial organizations, the chambers of commerce of the larger cities, bands and in other forms. In the morning sessions, the delegates will discuss their business; in the afternoons and evenings, they will take part in the lighter phases of the convention, such as band contests, water pageants, banquets and dances and other events which will bring the people—the "folks"—of the region together for a more intimate understanding of each other's affairs and to imbue them with a greater faith in their own communities and in all of South Texas.

The list of speakers includes Dr. R. B. Cousins, president of the South Texas State Teachers College, Kingsville; Joseph F. Leopold of Dallas, southern central manager of the United States Chamber of Commerce; Charles B. Braun of Dallas, division manager of the National Air Transport, Inc., and Senator Earle B. Mayfield.

At the organization meeting last year, the South Texas Chamber of Commerce outlined its "declarations of purposes," around which the new organization's endeavors should be centered. This declaration included immigration, the maintaining of a supply of Mexican labor through ample immigration and the reduction of emigration; transportation, railroad and highway; legislation, advertising, agriculture and irrigation. To take an inventory of progress and to make plans for continuing the work will be part of the task of the first annual convention.

Baltimore Builder to Erect 100 to 140 Dwellings.

Title to a six-acre tract with a frontage of about 500 feet on Gwynns Falls Park, Baltimore, has been acquired by Sidney R. Gehlert, a local builder, who plans to erect from 100 to 140 dwellings on the property. Mr. Gehlert is at present erecting 32 houses in the 3600 block Morley avenue, which is a part of a group of 42, and plans to begin the Gwynns Falls Park development upon the completion of these. The latter will probably be two stories, of brick construction. Building operations will be handled by Mr. Gehlert under the supervision of a superintendent.

One sewer and 18 paving contracts have been awarded by the city of Charleston, W. Va., at an aggregate of \$112,013.

New Orleans Cotton Exchange on Secretary Jardine's Belated Explanation of the Cotton Carry-Over.

The following statement was adopted by the board of directors of the New Orleans Cotton Exchange at a meeting held November 2:

"In final dismissal of the carry-over question, the New Orleans Cotton Exchange congratulates Secretary Jardine on his withdrawal of his estimate of the carry-over at the close of July last as official, with acknowledgment that approximately 47 per cent of the total was official from the Census Bureau and approximately 53 per cent from private sources.

"In submitting his explanation, however, the Secretary endeavors to defend the use of private data by claiming that 'the department critically examines all available sources and selects what in its judgment supplies the most dependable information.'

"This paragraph, so far as it relates to the cotton carry-over, is regrettable for the reason that a 'critical examination' should have demonstrated the erroneous character of the private information used by the department. This may be summarized, according to analysis made by Secretary Hester, as follows:

"(a) The Department of Agriculture uses the Manchester (England) International Cotton Federation's statistics, which in some respects are grossly inaccurate.

"(1) The Federation counts as consumed and in mill stocks 162,000 bales more than the total supply of American cotton actually on hand in India during the year. In other words, 162,000 bales more than was actually in existence.

"(2) The Federation reports that the Russian mills, with less than 7,000,000 spindles, held more American cotton at the close of July than the mills of Great Britain with 57,000,000 spindles. Further, the Federation claims that while Russia decreased her consumption 54 per cent, or, say, 144,000 bales, during the last half of this year, her mills increased their stocks during the same six months 113,000, equivalent to 943 per cent.

"(3) The Federation counts as full bales round bales averaging in weight 250 pounds, of which more than 600,000 bales were exported foreign from this country last year. While it is not possible to segregate from the Federation statistics how many of these round bales were included in its consumption and how many in its mill stocks, most of it was included in both, pointing to errors of 250,000 to 300,000 bales.

"(4) The Federation includes in its Japanese mill stocks more than 200,000 bales owned and held by the mills in the Japanese ports. This in itself is not an error, but it has led to duplication in another item of the Agricultural Department's carry-over by counting this same cotton in both port and mill stocks.

"(5) The Manchester Federation statistical department does not obtain reports direct from all of the world's mills. It receives no reports direct from American mills, which are in no way connected or affiliated with the Federation. The Federation acknowledges that it estimates or guesses at 10 per cent of the foreign mills. Inasmuch as this 10 per cent may and probably do use from 900,000 to 1,400,000 bales, or, possibly more, they afford room for material errors adjustable either way, according to inclination of the compiler.

"(b) The Agricultural Department embraced in its carry-over of 375,000 bales Japan and China ports and afloat, a duplication of over 200,000 bales already counted by the Federation in its total of mill stocks.

"(c) The Agricultural Department committed an error by including in its carry-over of American cotton nearly 100,000 bales of foreign cotton. This error the department has since attempted to adjust by transferring the difference to quantity of American cotton held abroad, so as to maintain its original faulty carry-over total.

"It is not possible, without having access to the details

of the private sources used by the Department of Agriculture, to state with accuracy all the errors in the department's announced figures, but it is fair to assume that an accurate check upon the returns would probably disclose between 700,000 and 800,000 bales of cotton in excess of the correct carry-over.

"It is regrettable that the Secretary of Agriculture has not frankly stated that the private figures he has used must be taken at their face value without endorsement by his department. Acceptance of Federation data as correct is accountable for most inflated calculations of the carry-over."

The statement is signed by Edgar B. Stern, president of the New Orleans Cotton Exchange.

Some Publications From a Busy Printing Office.

Fleet-McGinley, Inc., in addition to the interesting publications the Infantry Journal and Home Made Candies for Profit, reviewed elsewhere in this issue, sends us a batch of other publications handled within the last few days, indicating a rapid development of the business of that company in handling work of all kinds. Among other publications received is the October 21 issue of the Johns Hopkins Newsletter, also "Ye Black and Blue Jay," two publications by Johns Hopkins students.

Co-operative Chatter is a monthly publication of the Co-Operative Dental Laboratories of Baltimore. A new tire chain, claimed to be superior to all other chains that have ever been produced, and made by the John Leeding Company of Chicago, is known as the "Portex" and is fully described and illustrated in an interesting circular. Gada News, issued monthly by the Garage and Accessory Dealers Association of Baltimore, contains much information of value to garage and accessory dealers. An illustrated circular of the Kleiman Construction Company of Baltimore shows attractive two-story buildings containing six rooms and bath, with front and back porches, hardwood floors and many other modern conveniences, for sale at \$4250, with only \$150 cash and \$12.50 weekly, "or, make your own terms." The circular says one need not worry about the financing details. "When you buy a home from us we immediately put you in the building association and then you make all your weekly payments directly to them."

In Baltimore these two-story, well-constructed houses have become such a feature of the life and progress of this city that what has been done in this respect here should be studied throughout the South. It is difficult in many Southern cities to find homes of this character for sale at so low a price and on such easy terms, and yet the very success of this movement in Baltimore for many years past has been largely responsible in drawing to this city many of the great industrial enterprises which have located here.

Fleet-McGinley, Inc., also sends us a copy of the Congressional Digest for November, containing articles of much interest, including the following: "Issues Involved in Seating a Senator," "Provisions of United States Constitution," "Federal Laws and Senate Rules," "Procedure for Electing and Seating a Senator," "Review of Senate Election Disputes," "Action on Pending Smith and Vare Cases, Pro and Con Arguments by United States Senators and Constitutional Lawyers."

Floor and Wall Tile.

August production of floor and wall tile, as reported to the Department of Commerce by 38 concerns, making nearly 80 per cent of the total volume of floor and wall tile produced in 1925, totaled 5,488,986 square feet, as compared with 5,172,666 in July and 5,708,346 in August, 1926.

THE IRON AND STEEL SITUATION

Pittsburgh Steel Market.

Pittsburgh, November 7—[Special.]—The steel market of the past week has not furnished any visible reflection of the suggestions made at the recent meeting of the American Iron and Steel Institute, that the steel trade needs better selling methods and a greater spirit of co-operation. The atmosphere in sales offices is different from the atmosphere at these meetings. There is energetic competition all along the line, and while prices are not quotably lower than a week ago, except on blue annealed sheets, there is an easier tone in several lines, with more shading. Blue annealed sheets are now quotable at 2.10 cents to 2.15 cents as the open market, against 2.15 cents formerly and 2.25 cents until a month ago. A complication in the market is the competition in various width and thicknesses among plate mills, strip mills, jobbing mills and sheet mills, making products which overlap a great deal. Even skelp and merchant bar mills enter in some cases.

The rate of pig-iron production decreased about 3 per cent from September to October, making a rate 14 per cent below that of October, 1926. Steel mill operations continue to show a declining tendency, but only a slight one. There was almost uniform production from July to October, the salient feature being that there was not a substantial increase after July, as had occurred in each of the three preceding years. A seasonal decrease, to the end of the year, would conform with last year's experience, and would be indicated by the fact that the active season of consumption in various lines is ending, while there is no disposition to anticipate the new year. By the same token, however, a substantial increase in steel demand and production after January 1 is plainly indicated. This would be in keeping with the uniform experience in each of the past five years, or since 1921, the year of general liquidation.

Fabricated structural steel lettings reported last week were light, but the total of the past three weeks is 35 to 40 per cent above the general average since the first of the year and it is not unlikely that this year will show a gain over last of something like 10 per cent. The agricultural implement industry is also taking much more steel this year than last. Other large lines of steel consumption show decreases, none being important individually except in the cases of the oil and gas fields and the automobile industry.

The automobile industry continues to run lighter and lighter, the usual trend for the time of year. There is no information that the Ford Motor Company has placed orders for steel other than for practically experimental purposes or the making of display cars. When quantity production is tried, to an extent it is difficult to imagine at present when the eventually undertaken it will be on a very large scale, indeed, having a great livening influence upon the whole steel industry so monotonous, with orders individually very small but perhaps more numerous than ever before in the history of the steel trade.

Rail mills report orders in the past week for 175,000 tons of rails, the only buyer mentioned by name being the Chicago, Burlington and Quincy, which distributed orders for 60,000 tons, included in the total mentioned, raising the total in the rail buying movement to about 765,000 tons. The New York Central has an inquiry pending for 190,000 tons. There is talk of the railroads indulging in not a little freight car buying in the next few months, after a long period of almost no buying.

The valley pig-iron market shows practically no activity,

with prices unchanged but largely nominal. In the past month there have been declines in all the other northern markets, while last week Birmingham iron was marked down \$1.25, to \$16, but only for this year's delivery. Connellsville coke remains practically stagnant and scrap prices have declined.

Birmingham Iron Market.

Birmingham, Ala., November 7—[Special.]—The lower price for pig-iron has brought about some buying of the product, but not sufficiently as yet to term it a buying movement. As heretofore, a large percentage of the business being received stipulates early delivery and a consequence is that much iron is moving, comparatively speaking. The drastic reduction in the base price, from \$17.25 to \$16 per ton, No. 2 foundry, came as more of a surprise than one would think. Additional tonnage was noted on the surplus stock piles on furnace yards and on the turn of the month it was estimated that at least 20 per cent more foundry iron had been piled up than was to have been seen the first of the year on the yards. Buying continues on conservative lines and for that reason, despite the \$1.25 per ton reduction, there is no speculative trading noted.

Production of pig-iron is unchanged, 10 blast furnaces are making foundry iron, seven basic, one ferro-manganese and one special brand iron. Two or three of the furnaces on foundry iron have been "taking it easy" in iron production. The surplus stock will care for any and all demands for pig-iron for the next 90 days and longer. The production schedule will be kept intact.

Survey of the consuming end of the iron trade shows no actual improvement. Soil pipe has again lost ground, demand falling off, though building operations be steady. The pressure pipe production is around 80 per cent capacity and shipments steady. The pipe quotations are somewhat firmer than they have been, \$29 to \$30 per ton for six-inch and over sizes being asked. Concessions are not as drastic as they have been. There has been slight reduction of pipe on yards. Foundries and machine shops have not been requiring any great amount of iron recently and no activity is in sight.

While the pig-iron market has been "rocking along," so to speak, there has been nothing said in this district as to facing a Presidential campaign.

The steel market has set in for the year-end activities and the grade does not appear to be very prosperous. Estimate is that operations are at about 75 per cent capacity. Some of the mills and shops are going on schedule of about four days a week and no improvement on this pace is looked for during remainder of year. Lighter shapes of steel have been moving right along. Rail rolling continues, but not at a very active pace. New business from the railroads, 1928 delivery, is looked for any day now. This will bring about much encouragement, as it is followed by other demands.

The coal mining trade has shown shrinkage, by reason of reduced requirements in steam coal. Transportation companies report less traffic, most in agricultural sections. Yo-land Coal and Coke Company, J. B. McClary president, will shortly be in position to take up production on a steady scale at the new mine at Connellsville, prospective output to be around 1000 tons daily. Moss & McCormack plan development of coal mines on the Warrior River, Walker county. At the recent Southern Textile Association meeting a demonstration was made of coal pulverizing and burning, much interest being manifested. The Efficiency Fuel Engineering Corporation of Birmingham put up one of the machines.

The coke market continues good, production being main-

tained and practically every by-product coke oven in the district being in operation. Quotations are firm, \$5.50 per ton, foundry coke, on contract.

The scrap iron and steel market is slow. Heavy melting steel is weak at \$10.75, delivered in the territory. No. 1 cast and stove plate are still the more active of the items on the old material list.

Quotations on pig-iron and iron and steel scrap follow:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$16.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$16.50; iron of 2.75 to 3.25 per cent silicon, \$17.00; iron of 3.25 to 3.75 per cent silicon, \$17.50; charcoal iron, f. o. b. furnace, \$29.00.

OLD MATERIAL.

| | |
|---------------------------------|--------------------|
| Old steel axes | \$16.00 to \$17.00 |
| Old iron axes | 16.00 to 17.00 |
| Old steel rails | 12.50 to 13.50 |
| Heavy melting steel | 10.50 to 10.75 |
| No. 1 cast | 14.00 to 15.00 |
| Stove plate | 13.00 to 14.00 |
| No. 1 railroad wrought | 11.00 to 12.00 |
| Old car wheels | 12.00 to 13.00 |
| Old tramcar wheels | 12.50 to 13.50 |
| Machine-shop turnings | 8.00 to 9.00 |
| Cast-iron borings | 8.00 to 9.00 |
| Cast-iron borings (chem.) | 13.00 to 13.50 |

The Metal Market.

New York, November 7—[Special.]—Copper has been the stellar performer among the non-ferrous metals during the past week, the reaching of new low levels for the year in some of the other major metals having made the position of copper all the more conspicuous. The climax was reached when the price for export was advanced 10 points to 13.70 cents c. i. f. European ports and when the domestic price was marked up to 13 $\frac{3}{4}$ cents, the highest level in several months. Purchasing of copper was brisk and gained in momentum as the days advanced, the real strength of the market resting in the heavy purchasing for export. Prices rose continually on the London Metal Exchange and on some days as much as 3000 tons were sold.

The metals which dipped to new lows for the year were tin and zinc. Heavy purchasing followed the tin recession, but zinc continued in a stupor. Tin was down to 56 $\frac{3}{4}$ cents per pound and zinc was selling at 5 $\frac{3}{4}$ cents per pound, East St. Louis. Statistics pertaining to tin have become unfavorable all of a sudden. The world's visible supply declined only 400 tons during October, whereas 1000 tons had been the prediction; moreover, it is now predicted that shipments to the United States from the Straits Settlements in November will be 7500 tons, whereas 6000 tons is regarded as normal. This will mean a supply too abundant.

The more precious metals have been strong as to market position. Silver has advanced above 57 cents per ounce for the first time in months and quicksilver has advanced \$1 per flask to \$128 and at London has risen five shillings to £23 per flask.

The metals have been affected little by developments in the outside business world, but better co-operation and less cut-throat competition are needed throughout the metal industry, whether ferrous or non-ferrous.

Statistics for October for the various metals are now due. In copper, another reduction in surplus stocks is expected; on the other hand, it is believed that the surplus of zinc will show a gain. In view of the absence of an institute in the lead industry, figures are more vague than in other metals, but it is generally believed that stocks are declining in both this country and Europe. The world's visible supply of tin at the end of October was 14,684 tons, compared with 14,841 tons a year ago. The present supply is within 1000 tons of the low since the war.

The great bulk of copper purchases were for November delivery, with possibly one-third of the purchases for December delivery. No interest has been displayed in January

copper. Tin was bought as far ahead as May delivery and zinc has been contracted for for early next year.

The preponderance of copper sales was made at 13 $\frac{3}{4}$ cents per pound, although when the price reached 13 $\frac{3}{4}$ cents consumers followed the price upward. Likewise, foreign users did not hesitate because of the new quotation. The market differs from previous times, this year, in that when producers have essayed 13 $\frac{3}{4}$ cents before the interest of consumers immediately waned.

Zinc, at the other extreme, is markedly depressed. The price falls about \$1 per ton per day. Two weeks ago it was believed that 5 $\frac{3}{4}$ cents, East St. Louis, would prove the bottom of the market, but the figure has sagged below that. The ore price was cut another \$1 per ton to \$37 and ore production continues heavier than sales. Large purchasers of slab zinc, such as the Inland Steel Company, Youngstown Sheet and Tube Company and Newport Rolling Mills, who usually buy zinc once a week, have been out of the market, awaiting the bottom.

Sales of tin last week amounted to 1800 tons, or about double normal. On two days 600 tons each changed hands. The price at 56 $\frac{3}{4}$ cents per pound was 16 cents per pound under the high for the year, which is a sharp reduction even for tin. The low prices attracted the consumers and half of the purchasing was on their part. A feature of the statistics was the heavy shipments of Banka tin, over 1800 tons during October.

Lead has been more active than the preceding week and prices have been very steady. The American Smelting and Refining Company has been a steadying influence, keeping its price at 6.25 cents per pound, New York. At East St. Louis the price has been 6 to 6.02 $\frac{1}{2}$ cents. Low prices are discouraging production and many mines are now idle which had restarted at boom times of the past two years.

Public-Utility Earnings.

Gross earnings of public-utility enterprises in September, exclusive of telephone and telegraph companies, as reported to the Department of Commerce by 95 companies or systems operating gas, electric light, heat, power, traction and water services and comprising practically all the important organizations in the United States, were \$169,193,000, as compared with \$162,124,000 in August and \$159,406,000 in September, 1926.

Enameled Sheet-Metal Ware.

September shipments of enameled sheet-metal ware, as reported by 18 manufacturers, comprising approximately 80 per cent of the industry, were 309,449 dozens, valued at \$1,212,645, as compared with 330,746 dozens, valued at \$1,278,257 in August. The enameled ware included in this summary consists of cooking, household and hospital utensils having a vitreous coat on a sheet steel or iron base and does not include equipment such as stoves, heaters, signs, etc.

New Steamship Service to Miami.

Further recognition of the development of the South and the ever-increasing importance of that section is indicated in a recent announcement by the Merchants and Miners Transportation Company of "a new and improved passenger service to Florida," with a weekly express service from Baltimore to Jacksonville and Miami, without intermediate stops. As the company puts it:

"Although one of the pioneer lines to Florida, this will be the first season that the company's ships will go to Jacksonville without stop—and the first of passenger sailings from Baltimore to Miami."

RAILROADS

Freight Loadings Over Million Cars a Week.

Cars loaded with revenue freight for the week ended on October 22 totaled 1,128,486 cars, according to reports filed by the railroads with the Car Service Division of the American Railway Association. This was an increase of 8614 cars above the preceding week this year, with increases being reported in the loading of grain and grain products, forest products, merchandise and less than carload lot freight and miscellaneous freight. Decreases, however, were shown in the loading of all other commodities. The total for the week of October 22 was a decrease of 72,455 cars under the same week last year but 7809 cars above the same week in 1925. All districts, except the Central Western, reported decreases in the total loading of all commodities compared with the corresponding period in 1926, but all except the Eastern, Allegheny and Pocahontas districts reported increases compared with the corresponding period in 1925.

Loading of revenue freight this year compared with the two previous years follows:

| | 1927 | 1926 | 1925 |
|-------------------------------|------------|------------|------------|
| Five weeks in January | 4,524,749 | 4,428,256 | 4,456,949 |
| Four weeks in February | 3,823,931 | 3,677,332 | 3,623,047 |
| Four weeks in March | 4,016,395 | 3,877,397 | 3,702,413 |
| Five weeks in April | 4,890,749 | 4,791,006 | 4,710,903 |
| Four weeks in May | 4,096,742 | 4,145,820 | 3,869,306 |
| Four weeks in June | 3,974,160 | 4,089,340 | 3,965,872 |
| Five weeks in July | 4,935,397 | 5,213,759 | 4,945,091 |
| Four weeks in August | 4,249,359 | 4,388,118 | 4,321,427 |
| Four weeks in September | 4,360,022 | 4,523,112 | 4,297,936 |
| Week ended October 1 | 1,126,390 | 1,180,049 | 1,113,283 |
| Week ended October 8 | 1,100,552 | 1,174,928 | 1,106,036 |
| Week ended October 15 | 1,119,872 | 1,202,780 | 1,106,009 |
| Week ended October 22 | 1,128,486 | 1,200,941 | 1,120,677 |
| Total | 43,346,804 | 43,892,838 | 42,338,949 |

Oil-Electric Locomotive Makes Fine Passenger Run.

A recent test demonstrated that an oil-electric locomotive could be used for passenger traffic. The test consisted of a run of 183.7 miles from Hornell, N. Y., to Meadville, Pa., and it was the first time, according to the Ingersoll-Rand Company, that a locomotive of this kind has been employed to haul a passenger train. The locomotive used is one of two 100-ton oil-electric engines lately acquired by the Erie Railroad for switching service and the first of these has been doing that work, showing marked operating economies. The second unit—the one that made the passenger run on October 13, was geared for high speed—the locomotive being otherwise similar in all respects to the other. The interposed gearing makes it possible for the second unit to travel faster.

This oil-electric locomotive is designed to develop 600 horsepower, and it has about one-quarter the power of the regular steam locomotive used by the Erie to make its fastest passenger run between Hornell and Meadville; and the train of four cars handled on the test run was about one-third as heavy as the regular train. In other words, the load on the oil-electric locomotive, per unit of power, was greater than is ordinarily the case with the regular train.

The run from Hornell to Meadville—practically 184 miles—was made in 5 hours and 30 minutes, with 6 stops, each of 3 minutes' duration. The train was obliged to slow down on numerous occasions because of section gangs and construction work on new bridges. The fuel consumed represented a train cost averaging only 3.65 cents a mile!

Aside from the remarkable fuel economy, the other outstanding feature was the quickness with which the steam-locomotive engineers mastered the control essentials of the

oil-electric locomotive, with which they had had no previous acquaintance. The first engineer on the available list, M. H. Coville, was assigned to the oil-electric locomotive. When he entered the cab he was merely told: "This is your throttle; this is your reverse lever, and this is your air-brake control. Now, go to it." Within three minutes he had the train under way. At Salamanca, the relief point, the second engineer, L. C. Rhodes, received instructions that were virtually a duplication of those given to the man he relieved. He, too, lost no time in getting his train in motion, and as a consequence the oil-electric locomotive kept to the schedule prescribed for the steam locomotive on the same run.

This excellent performance of the oil-electric locomotive appears to have opened up a much wider field of usefulness for this type of motive power, and it may be first used in passenger service on branch lines, where the need of operating economy is under consideration. It is geared for high speed, but otherwise it is like the other oil-electric locomotives also built jointly by the American Locomotive Company, the General Electric Company and the Ingersoll-Rand Company for terminal service.

Boston & Maine Turns to American Rails After Trying Low-Priced German Product.

"Turning to the home market after patronizing interests abroad for a year or two, the Boston & Maine Railroad has placed an order for about 18,000 tons of steel rails, with the Bethlehem Steel Corporation. The reason for the road not again buying foreign-made rails was not made known, but the general opinion among steel men is that the German rails which the Boston & Maine purchased last year failed to measure up to requirements," states an article in the New York Times, although a flat denial has been made of this reported inferiority.

The Times' article said:

"It has been said, however, that the Boston & Maine found the German rails, which admittedly were purchased last year in the interests of lower prices, far inferior to those of American manufacture. Since the German-made rails were installed on lines of the Boston & Maine, it was said, rail replacements were necessitated so widely and frequently that they became one of the road's worst difficulties. Another opinion was advanced, also, that the deliveries of foreign-made rails were so delayed beyond the promised dates as to prove extremely embarrassing to buyers."

Texas-Mexican Railroad Making Improvements.

New 75-pound steel rails are being laid on the Texas-Mexican Railroad between Pescadita and Laredo, Texas, 25 miles, completing the replacing of steel on the entire line between Corpus Christi and Laredo, 161 miles. The Texas-Mexican is enjoying a period of unusual prosperity, due to oil development along its route and the dividing up of many ranches into farming tracts. This railroad is a part of the National Railways of Mexico, and it holds the unique distinction of being owned by the Mexican Government. Several offers for its purchase have been made during the last few years, but the Mexican Government refuses to dispose of its 51 per cent of the stock. The Southern Pacific and the Missouri Pacific intersect the Texas-Mexican and each of them sought it. The Missouri-Kansas-Texas Railroad also tried to purchase it a few years ago. The establishment of a new deep-water port at Corpus Christi is proving of great benefit to the Texas-Mexican from a traffic standpoint.

R. E. Herrington has been appointed freight traffic agent of the Nashville, Chattanooga and St. Louis Railway, with office at 209 Bibb Building, Macon, Ga., to succeed D. W. Taylor, resigned.

HOW FAR RAILROADS PLAN AHEAD.

Three, Five and Even Ten Years in View, Says President Atterbury of Pennsylvania System.

In the course of his address before the convention of the National Association of Railroad and Utilities Commissioners held at Dallas, Texas, during the week ended October 22, President W. W. Atterbury of the Pennsylvania Railroad Company presented some salient facts for the consideration of his hearers, saying:

"As you well know, railroads cannot come into being overnight. The money that is borrowed for railroad development, say, three or five years hence must be obtained upon the results of preceding years and upon the credit standing of the railroad based on such results. It was nearly twenty years from the time the Pennsylvania Railroad improvement in and through New York city was authorized until that vast improvement was finally completed.

"The Pennsylvania Railroad has a schedule on the desks of its officers of improvements that will be required the following year, three years, five years and even ten years ahead. The railroad must invest in land in anticipation of having to build yards and tracks, etc., to develop its facilities in the years to come. As business formerly was constituted, we would have periods of business depression, followed in a few years by marked prosperity. The railroad facilities to handle the traffic created by that prosperity had to be arranged for years in advance. Railroad traffic now grows somewhat more slowly, but we still have to look ahead and plan years in advance.

"It is obvious that railroad managers cannot build for the future unless they feel the investment will be supported by the public and the regulating authorities. It is a serious act for me, as president of the Pennsylvania Railroad, to recommend to our board of directors that we ask our stockholders to authorize an additional \$50,000,000 or \$100,000,000 in stock or bonds with which to increase our facilities. When we get that money we become trustees for it, and we have a solemn duty to earn and pay a reasonable interest upon that money. We take a very real risk in estimating the volume of traffic that will be available with which to earn that interest, and it is vital for us to feel sure that the public, through its legislative and regulatory authorities, will permit us, when the traffic is available, to earn the money necessary to pay that fair return to which investors are entitled. * * *

"We are doing new things. For instance, the railroads are developing new plans of packing in containers which can be lifted from a motortruck in one city one evening, placed in a car and moved overnight, and early the next morning taken off the railroad car and put onto another motortruck and delivered to destination promptly. This development of container transportation promises to revolutionize many of our methods. It may ultimately relieve us of one of the most expensive of our activities in the handling of less-than-carload freight at transfer stations."

Test of Freight Train Resistance on Curves.

Bulletin No. 167 of the Engineering Experiment Station of the University of Illinois presents the results of tests made with five freight trains in order to find the excess of their resistance on curved track over that on straight track. This excess, termed curve resistance, was determined on a one-degree curve and a three-degree curve. The tests were run during warm weather, and all but seven of the tests were made when wheels and rails were dry. It was found that the general average curve resistance, disregarding speed distinction, was practically the same on the two curves. The few tests run on wet rails gave evidence that curve resistance was diminished when rails and wheels were wet. Copies of the bulletin may be obtained without charge by addressing the Engineering Experiment Station, Urbana, Ill.

TEXTILE

Textile Plants Complete Improvements.

Loudon, Tenn.—Improvements at the Loudon and Lenoir City plants of C. H. Bacon & Co. are nearing completion, with some facilities operating in part. A new boiler plant of two 300-horsepower boilers made by the Casey-Hedges Company, Chattanooga, and stokers made by the Combustion Engineering Company, New York, will replace the present plant, which has become inadequate for increased dye house and general steam demands.

At Lenoir City, Tenn., a new building will be used for storage on the first floor and for inspection purposes on the second. A third story will also be available and all floors will be connected by elevator. Production of the plant will be greatly increased. J. E. Sirrine & Co., Greenville, S. C., are engineers.

National Weaving Company Organized.

Lowell, N. C.—A reorganization of the Art Cloth Mills, Inc., here as the National Weaving Company has been effected by the selection of R. L. Stowe, president; A. C. Lineberger, Sr., vice-president, and A. C. Lineberger, Jr., secretary and treasurer. It is understood that \$300,000 of preferred stock will be issued to pay off certain indebtedness and that the mill will continue to manufacture draperies, upholsteries, shirt and dress goods. The plant is equipped with approximately 600 looms.

It is stated that the Stowe and Lineberger interests have also acquired interests in the Judson Mills of Greenville, S. C., owned by the Deering-Milliken Company of New York, and that this plant will now be operated by local capital. The Judson mills are equipped with 85 cards, 52,864 spindles, 9576 twister spindles and 2188 looms for the production of fine and fancy colored tissues, voiles, lawns, mixed silk and cotton dress goods, handkerchief cloths, draperies and broad silks, 60s ply combed peeler yarns and ball warps.

New Rayon Thread Developments.

Manchester, Eng., October 19.—According to the Manchester Daily Dispatch rumors are again busy regarding developments in connection with the Nuera Art Silk Co., at their works at St. Helen's, Lancashire. A writer in that paper states:

"Only last week the Daily Dispatch was able to announce that the great thread firm of J. & P. Coats were understood to have been carrying out experiments with Nuera silk with the object of producing a silk thread and that these had been successful.

"We now learn on reliable authority that in order to carry out extensions at St. Helen's a substantial sum of money, reputed to be in the neighborhood of £500,000, is to be advanced by Courtaulds Ltd., for the purpose of these developments.

"It was also understood that the Lillienfeld process formed no part of the Nuera Company's original project at the inception of the company, but that its development had taken place since.

"It is stated that it is in connection with this process that developments have occurred between the company and the great sewing cotton firms.

"These developments justify more than ordinary attention throughout the Lancashire industry, for it has all along been claimed that if Lancashire could place on the market a silk, whether viscose or acetate, possessing several times the strength of cotton, stronger than linen and suitable for mixing with cotton, the great Lancashire industry would be given several years start against other countries in the markets of the world."

GOOD ROADS AND STREETS

Plans for \$600,000 Bridge at Fulton, Ark.

Plans for the construction of a reinforced concrete bridge across the Red River at Fulton, Ark., are being considered by the Arkansas State Highway Commission, Little Rock, according to information from M. E. Melton, secretary of the Chamber of Commerce, Texarkana, Ark.-Texas, who advises that the Highway Department has announced its intention of building a reinforced concrete structure instead of a steel bridge. The river is navigable, it is said, and would either require a draw span or bridge with sufficient clearance to meet navigation needs.

Ira G. Hedrick, Inc., consulting engineer, Shreveport, La., who prepared preliminary sketches for the purpose of enabling the State Highway Department to arrive at the type of bridge to build, estimates the cost of a reinforced concrete high bridge, with a 27-foot clear roadway between hand rails, at approximately \$600,000. It is Mr. Hedrick's opinion that foundation conditions at Fulton are such that a concrete bridge would be better than the steel type. It is figured that piers can be landed on solid shale or soapstone at an elevation of about 25 feet below zero on the gauge, and that this shale or soapstone is capable of resisting loads to be put upon it by the arch piers.

Developing Good Roads in the South.

Recent achievements in the development of a great good roads system in the South, and plans on that line for the future, are set forth in the *Appalachian Journal*, September issue, published by J. R. Williams at Knoxville, Tenn.

In the opening of a 10-mile concrete line at Berea, a fast road is now complete from Cincinnati to Knoxville, described as "probably the most heavily traveled north-south highway link in the South," while from Knoxville excellent roads lead on to Atlanta, Chattanooga, Asheville and through to Florida, and also an excellent State highway runs east across Virginia, with branches into upper East Tennessee. These new developments, it is cited, "will interest all-season tourists in Kentucky, Tennessee, North Carolina and the Virginias and all Florida tourists." Also, the 200-mile stretch from Louisville to Nashville is reported to be in prime condition.

For further development, a United Press despatch is quoted as describing Governor Fisher of Pennsylvania as "in hearty accord with plans to establish a definite highway between New Orleans and New York by way of Philadelphia." At present, there is no special route connecting the East with New Orleans, and suggestion has been made that such a route follow as closely as possible the old Colonial route used by Stephen Girard in maintaining communication between New Orleans and Philadelphia.

\$4,344,000 in Bond Issues Proposed.

Oklahoma City, Okla.—City council has passed ordinances calling for an election November 29 on a bond issue of \$900,000 for a new conduit and filtration plant improvements and on an issue of \$100,000 for extension of water mains. Other items estimated to bring the total to \$4,344,000 are being considered and it is thought that ordinances will be passed by the council submitting these issues at the same time. They will include \$250,000 for sanitary sewers, \$70,000 for fire department, \$50,000 for traffic control equipment, \$2,424,000 for storm sewers and \$550,000 for two bridges over the North Canadian River at Exchange and Robinson avenues and for flood control. According to terms of the ordinances, the bonds will be sold within three to five years and will extend over a period of 25 years.

\$500,000 Bridge Projected for Richmond.

Richmond, Va.—A resolution has recently been introduced at a meeting of the Board of Aldermen by Henry E. Woody, requesting that body to authorize the construction of a \$500,000 bridge on the line of Broad street, between Twelfth and Twenty-third streets. This project is intended to provide a big viaduct for the East End.

Kentucky Asks Bids on 32 Miles of Road Work.

Frankfort, Ky.—Bids will be received until November 22 by the State Highway Commission for three road projects covering a total of 32.6 miles of grade and drainage construction. The work will include 3.8 miles of the Hartford-Calhoun road in Ohio county, 2.7 miles of the Beaver Dam-Rozine road, also in Ohio county, and 26.1 miles of the Morehead-Sandy Hook road in Elliott and Rowan counties.

Greenville Sewer Contracts.

Two contracts approximating \$75,000 have been awarded by the Greater Greenville (S. C.) Sewer District Commission in connection with the new \$3,000,000 sewer system for Greater Greenville now under construction. The commission wires that contract for 11,500 feet of trunk sewer line has been awarded to Tucker & Laxton, Charlotte, N. C., at \$70,219, and for the installation of electrical equipment for a disposal plant to Huntington & Guerry, Greenville, at \$4600.

Texas County to Sell \$2,000,000 Road Bonds.

Houston, Texas.—According to an announcement by H. L. Washburn, Harris county auditor, \$2,000,000 of road bonds will be sold on November 15. The securities will run for 30 years and will bear an interest rate of 4½ per cent. They are a part of a \$7,000,000 issue authorized several months ago and funds from this sale will be used for paving the Old Spanish Trail west, Washington county highway, Goose Creek road and other projects.

Contract for \$192,000 Viaduct.

Springfield, Mo.—Contract has been awarded by the City of Springfield, F. D. Hughes, consulting engineer, to M. E. Gillioz, Monet, Mo., at \$149,093, for the construction of a concrete viaduct over the Frisco and Missouri-Pacific railway tracks and Jordan Creek. The structure will be 1135 feet long and will carry a 40-foot roadway and two 6-foot walks. Additional contracts to be awarded will include roadway paving and lighting, bringing the estimated cost of the structure to \$192,000.

\$1,000,000 Coastal Highway Bonds Offered.

Columbia, S. C.—Sealed proposals addressed to Wade Stackhouse, chairman of the Board of Coastal Highway Commissioners, E. T. H. Shaffer, secretary, will be received until November 17 at the office of the State Treasurer in this city for the purchase of \$1,000,000 of Coastal Highway bonds of the counties of Dillon, Florence, Williamsburg, Colleton, Beaufort and Jasper. The bonds will constitute a joint obligation of these counties and will bear an interest rate of 4½ per cent. They will mature at the rate of \$111,000 from 1931 to 1938, inclusive, and \$112,000 in 1939.

Goliad County Judge J. A. White, Goliad, Texas, advises that the Goliad County Commissioners Court of Goliad county has called an election for November 19 on an issue of \$400,000 highway bonds.

LUMBER AND BUILDING MATERIALS

Timber Bamboo Grows a Foot a Day in South.

Describing the timber bamboo, which the United States Department of Agriculture recommends for culture in most of the cotton States of the South, B. T. Galloway writes in a leaflet which has been issued as a separate publication from the Yearbook of Agriculture, 1926:

"Eventually, when a grove is fully established, magnificent stems shoot up to a height of 60 to 70 feet, furnishing poles 4 to 5 inches in diameter at the base. The plants have the remarkable faculty of reaching their full size in a short time, usually in two to four weeks, depending on the age of the parents. The new shoot suddenly bursts through the ground in the spring and then grows a foot or more a day. As the cane shoots skyward the leaves, branches, and branchlets unfold, producing a most striking and beautiful effect."

After attaining full size the plants may require three to five years to fully harden and ripen. Aside from its beauty timber bamboo has commercial value and is convenient on the farm for light fences, fence posts, trellises, water-carrying pipes, baskets, crates, poultry coops and houses, and light ladders. Commercial uses include fish rods, furniture making, curtain and rug rods, and many other purposes. It is reported to thrive in most localities where deep well-drained soil is available and where temperatures do not fall below 10 to 15 degrees above zero.

The timber bamboo is such a recent importation that small plants are rarely if ever available in nurseries. The department has been furnishing plants to cooperators in the South willing to guarantee adequate care.

Big Timbers Cut and Shipped.

The accompanying illustration shows a part of five double carloads of heavy timbers shipped on the same day from the plant of the Great Southern Lumber Company at Bogalusa, La. These timbers were merchantable sawn long-leaf yellow pine 12 by 12 inches to 18 by 18 inches running from 54 to 63 feet long, and totaling 125,996 feet board measure. Shipment was made through the American Pitch Pine Export Company of New Orleans to foreign ports.

The program of reforestation, as put into effect by the Great Southern company combined with their vast holdings of long-leaf yellow pine virgin timber, will, it is said, make the production of similar stock a permanent operation.

The Lumber Movement.

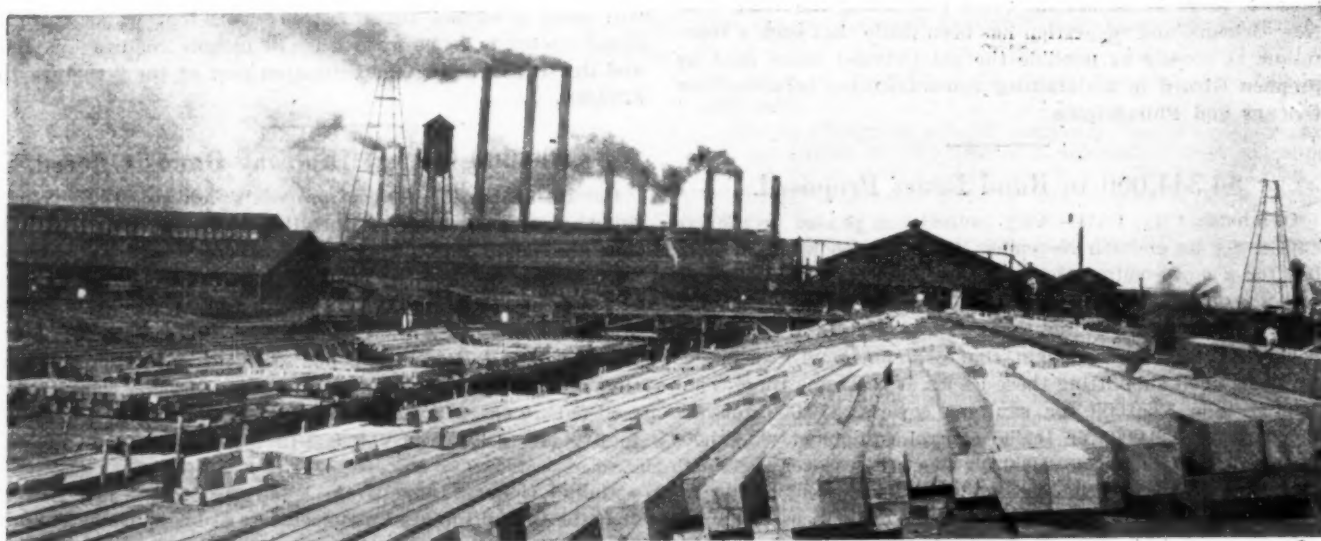
Shipments and orders of the organized lumber industry were about the same for the week ended October 29 as for the preceding week, according to telegraphic reports received by the National Lumber Manufacturers Association from 500 of the leading commercial lumber mills of the country. The 335 comparably reporting softwood mills showed production about the same and slight decreases in shipments and new business, when compared with reports from 345 mills for the week earlier. In comparison with the corresponding week a year ago, production was about the same with increases in shipments and new business, particularly heavy in new business. The 137 hardwood operations showed an increase in production and considerable decreases in shipments and new business, when compared with reports from 127 mills for the previous week. In comparison with the same period last year, when 19 fewer mills reported, there is an increase in production, a falling off in shipments and a marked decrease in new business.

The unfilled orders of 224 Southern Pine and West Coast mills at the end of last week amounted to 546,124,379 feet, as against 537,499,924 feet for 224 mills the previous week. The 106 identical Southern Pine mills in the group showed unfilled orders of 205,632,765 feet last week, as against 201,439,953 feet for the week before. For the 118 West Coast mills the unfilled orders were 340,491,614 feet, as against 336,059,971 feet for 118 mills a week earlier.

Altogether the 335 comparably reporting softwood mills had shipments 94 per cent and orders 92 per cent of actual production. For the Southern Pine mills these percentages were, respectively, 95 and 101 and for the West Coast mills 88 and 89.

Galvanized Sheet-Metal Ware.

September shipments of galvanized sheet-metal ware, as reported by 15 concerns comprising a large proportion of the industry, were 172,382 dozens, valued at \$695,077, as compared with 196,439 dozens in August, valued at \$715,343. The 1927 figures are not strictly comparable with those for 1926, due to an increase in the number of reporting concerns from 13 to 15. The galvanized ware included in this summary is the product resulting from dipping made-up shapes in molten zinc and not utensils of galvanized sheets.

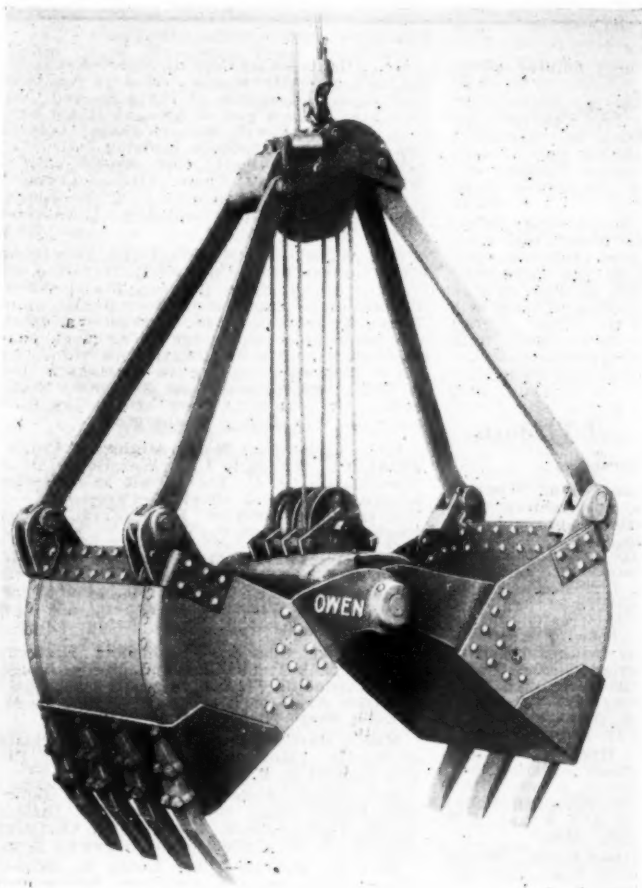


PART OF ONE DAY'S SHIPMENT OF HEAVY TIMBERS BY THE GREAT SOUTHERN LUMBER COMPANY.

MECHANICAL

Digging and Rehandling Buckets Improved.

The Owen Bucket Company, of Cleveland, Ohio, manufacturers of clamshell buckets, have brought out two new models, Type "M," a digging bucket, and Type "K" a rehandling bucket. Though both of these follow the general principles of design and construction of their other and earlier products, many details are improved upon. One very



TYPE M DIGGING BUCKET.

important result is a reduction of upkeep cost to less than half of that necessary on the buckets they replace.

The Type "M" bucket is primarily a digger, designed for general contracting, excavating, and general purpose work. It is made in three models, namely, Type "M" standard, special and narrow. The narrow or standard type buckets when equipped with special grit-proof arm bracket construction are known as the Type "M" special.

The rehandler, known as the Type "K," is a lighter weight bucket of great strength and durability designed particularly for fast and efficient rehandling of a wide range of materials. It is also made in three models, called the Standard Type "K," the special, and the hi-speed. The Type "K" hi-speed has a different shell with exceptionally sharp pitch to the bottom plates for rapid rehandling of loose materials. Both models can be furnished with special grit-proof lubricated bearings, and when so equipped are known as the Type "K" special.

A few of the important improvements and changes incorporated in these new types are as follows: A new design of crosshead in one piece having 17 less parts than on any previous type of Owen bucket makes it possible to shorten the arms and provides for operation in reduced head room.

The life of the closing cable has been increased by eliminating the possibility of the cable chafing on any part of the bucket. A distinctive feature of the new type is provision for complete protection and lubrication of the main or center shaft bearings which has double the bearing area of the older types. This feature prevents grit or fine material working in on the bearings and makes clean lubrication possible at all times.

The new buckets have extra heavy special alloy steel lips extending up the side plates past the wearing point instead of the flat cutting blades or plates formerly used. Actual tests have proven that these new lips are at least 200 per cent more durable than the old blades, with greater ability to resist abrasion.

Classification of Fire Clay Shapes Other Than Straight Tile.

A renaissance in the refractories industry takes definite shape in the publication of a report by the Classification Committee of the American Refractories Institute. The report is in the form of a set of rules and formulae adopted by the Institute and is entitled "Classification of Fire Clay Shapes other than Straight Tile." To the layman the title suggests little, but to those identified with refractories procedure in the past, the universal adoption of such a classification code signifies an achievement which marks a turning point in the industry and in which the Institute and its Committee may well take pride, for this code once-and-for-all places upon a commonly-accepted basis the methods of determining costs of all special fire brick shapes.

This forward step is the cumulative result of over fifteen years' work of individual members of the Classification Committee, as well as of many months' deliberation by the committee as a whole. The committee, composed of representatives of all important producing areas in the eastern half of the United States, has had free access to the costs of manufacturers in the several producing districts, and its conclusions are thoroughly representative. Therefore, one may presume the report to be inclusive and complete.

Mechanically, the classification leaves nothing to be desired. Each rule and formula is definitely laid down in easily-understood language, and one or more illustrative examples follow in order to insure its proper interpretation. For instance, Rule I deals with the Method of Squaring Irregular Shapes. This is the basic rule for the entire system of classification; and it is logically followed by seven other rules of general character. These cover Volume Reduction, Applying Composite Base, Mould Expense, Quantity Differentials, Over-shipments, Determining 9-inch Equivalent and Disposition of Decimals in Piece Prices.

With the eight general rules established, every shape—from the simple arch, key or wedge to the intricate notched and hollow forms—is classified in accordance with twelve distinct groups. As in the case of the general rules, the classification rule is clearly stated for each group, followed again by illustrative examples.

Even from this brief description, it readily may be seen how conclusively the code of the Classification Committee fills a need which has long existed, and places the buying and selling of special fire brick shapes upon a sound, scientific basis. There is now no excuse for the manufacturer to lose money on an order for special shapes of fire clay brick, nor the buyer to pay an exorbitant price through ignorance of the production costs.

Persons actually identified with the purchasing of fire brick can obtain copies of the report by writing to the American Refractories Institute, Oliver Building, Pittsburgh, Pennsylvania, or to any fire brick manufacturer.

CONSTRUCTION DEPARTMENT

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

The date at the end of an item indicates issue of the Manufacturers Record in which earlier facts about the same enterprise were published.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

Airports, Airplane Plants, Etc.

Ark., Pine Bluff—Southern Aircraft Corp. incorporated; B. T. Kaufman, 805 W. 26th St.; R. R. Flinn, D. O. Welch.

Ark., Texarkana—City contemplates establishing airport; probably acquire 160 acres in East Heights Community. Address City Clerk.

Fla., Pensacola—City Commrs. plan bond issue for improvements to Legion field. See Financial News—Bond Issues Proposed.

Fla., St. Petersburg—City Comm., reported, gave approval to plans of St. Petersburg Aero Club for construction of airplane hangar at Piper-Fuller flying field.

Fla., St. Petersburg—City Comm. voted \$8000 for airport. See Financial News—Bond Issues Proposed. 10-6

Fla., Tampa—City Comm., Wallace Davis, Sec., and associates interested in airport development; probably acquire 160 acres (Drew property) for new site.

Ga., Atlanta—Dept. of Commerce, Bureau of Lighthouses, Washington, D. C., Airways Div., F. C. Hengsbury, Ch. Engr., received low bid from Harrison Wright, Charlotte, N. C., for lighting the airways from Atlanta to Spartanburg and from Spartanburg to Greensboro; southern section of airway from Atlanta to Spartanburg, about 130 miles will be marked by 18 rotating electric searchlight beacons and 1 373-mm. flashing acetylene lantern; section from Spartanburg to Greensboro, about 140 miles, will be marked by 14 rotating electric searchlight beacons and 1 375-mm. flashing acetylene lantern; each field to have boundary lighting system in addition to the standard rotating searchlight.

Mo., Joplin—Joplin Special Road Dist. Comm., reported, soon begin work of laying out new municipal airport, has 160-acre site on W. Seventh St.; O. P. Mahoney, Commr. of Streets.

Mo., St. Louis—A. B. Lambert, 457 N. Kingshighway, has submitted plans for proposed Lambert-St. Louis Field fronting 3800 ft. on Natural Bridge Rd., 2600 ft. on Station Rd. and 4000 ft. on Wabash R. R. to City Officials, Municipal Air Port Plan and Scope Committee and St. Louis Chamber of Commerce; field embodies all necessary requisites. Administration Bldg., air mail and passenger depot, meteorological and air traffic control station, gasoline and oil supply station, air service station, street car loop and terminal, railroad station and switching, hangars, machine shop and central power station, air service station, fire engine house, restaurant, hard roads to runways and buildings, night lighting system, unlimited parking facilities, etc., cinder runway for take-off and landing for planes weighing from 15,000 to 25,000 lbs.; estimated cost \$1,200,000; Study and Farrar, Arcade Bldg., Architects. 11-3

Okla., Enid—John Clover, Paul Gleason and associates interested in establishing aviation field.

Okla., Holdenville—Will Bethel of Seminole, reported, plans establishing aviation field.

Okla., Tulsa—G. A. Blackstone and B. R. Cross, both Minneapolis, Minn., reported, acquired Tulsa airport on Broken Arrow Road, install additional equipment and operate.

Tex., Dallas—Dallas Aviation School, Incorporated; W. F. Long, E. C. Hammond, L. A. Winship.

Tex., Houston—J. L. Schroeder, 6900 Washington St., reported, considering rebuilding burned portion of airplane plant, including parts and repair depts.; cost about \$20,000. 10-27

Va., Alexandria—Berliner Aircraft Co., reported, started manufacture of monoplanes,

weekly capacity two planes; employ about 35 persons. 8-25

Va., Richmond—Charles A. Levine, 233 Broadway, New York City, reported, announced actual construction on Richmond airplane factory will get under way between now and Jan. 1, 1928; plans building one plane weekly, gradually increasing output. 10-27

W. Va., Wheeling—Fokker Aircraft Corp., 110 E. Forty-second St., New York City, offering 7% cumulative first preferred stock together with 1½ shares no par value common stock through Hazlett & Burt, Wheeling Steel Corp. Bldg.; proceeds of issue will provide working capital for large aircraft production factory to be immediately built near Glendale; plant will supplement manufacturing facilities of present factory in New Jersey. 10-27

Bridges, Culverts and Viaducts

Proposed Construction

Alabama—State Highway Comm., Woolsey Fennell, Highway Director, receives bids Nov. 29 for 4 bridges, bridge approach and road extension: Morgan County—42 mi. south approach to bridge over Tennessee River, and extend Alabama St. to Sixth Ave., State Highway No. 7, between Athens and Decatur, 21,000 lb. deformed bar reinforcement, 54,000 F. B. M. treated bridge timber; Autauga County—between Prattville and Autaugaville: concrete bridge, five 32-ft. clear spans, 24-ft. roadway; 4 treated timber bridges, concrete floor: 103-ft. long, 6x17-ft. span; 2 bridges 60-ft. long, 4x17-ft. spans, one bridge 15x18-ft. spans; plans on file; W. A. McCalla, State Highway Engr.

Ark., Augusta—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, plans state-owned toll bridge across White River, on Highway No. 16, Woodruff County; Howard, Harrington & Ash, Engrs., 1210 Baltimore Ave., Kansas City, Mo.

Ark., Ozark—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, considering toll bridge across Arkansas River at Ozark, connecting Ozark and Charleston; cost between \$200,000 and \$250,000; O. L. Hemphill, State Highway Engr.

Fla., Miami—City, Frank H. Wharton, Mgr., granted permit from War Dept., Washington, D. C., for bridge over Miami River on S. E. Second St.; R. H. Wilson, Bridge Engr.; Harrington, Howard & Ash, Engrs., 1210 Baltimore Ave., Kansas City, Mo., preparing plans.

Fla., St. Augustine—State Road Dept., F. A. Hathaway, Chmn., Tallahassee, plans bridge over San Sebastian River, from foot of Cerro St., linking southern end of city with new State Road No. 4. See Financial News—Bond Issues Proposed. 11-3

Fla., St. Petersburg—Robinson & Steinman, Consult. Engrs., 25 Church St., New York, advise regard recent report that War Department had approved permit to Dr. H. Simmonds, Jr., 326 East Eleventh St., St. Petersburg, and Associates, to build \$6,000,000 bridge and causeway across Tampa Bay, between Pinellas Point and Piney Point: "Tampa Bay Bridge application now before War Dept., Washington, plans prepared by us." Dr. Simmonds wires: "War Department has not yet granted permit for proposed bridge."

Fla., West Palm Beach—Palm Beach County receives bids for 4 bridges. See Roads, Streets, Paving.

Fla., West Palm Beach—Palm Beach County Commrs., Fred E. Feno, Chmn., receive bids Nov. 16 for widening approaches and laying sidewalks approaching Lake Worth Bridge; 1500 cu. yd. embankment, 5285 sq. ft. concrete sidewalks; plans from Jake Boyd, County Engr.

Ga., Atlanta—City Council, reported, will let contract probably within few days for twin viaducts over railroads at Pryor St. and Central Ave. at each end of present Union Station; walkways will connect these viaducts and with other viaducts bridging railroads; will raise street level; cost several million dollars; W. H. Lee, Chmn. Viaduct Committee, Chamber of Commerce; S. B. Black, Bridge Engr., 458 Clairmont Ave.; I. N. Ragsdale, Mayor. 10-6

Ky., Augusta—E. M. Elliott and Associates, 370 Michigan Blvd., Chicago, Ill., reported, requested permit from Bracken Fiscal Court, Brooksville, Augusta City Council and Brown County Commrs., Georgetown, Ohio, for permit for toll bridge at Augusta, connecting A and P Highway, with Kentucky State Highway, leading to Lexington and to South; approximate cost \$900,000; application for permit to erect bridge has been made to War Dept., Washington.

Ky., Calhoun—State Highway Comm., Frankfort, applied to U. S. War Department, Washington, D. C., for permit to construct bridge over Pond Creek, between McLean and Hopkins Counties; H. R. Creal, Bridge Engr.

Ky., Wickliffe—State Highway Comm., Frankfort, and Illinois Central R. R., A. F. Blaess, Ch. Engr., Chicago, Ill., plan underpass, west of Wickliffe, on Federal Aid Project No. 131-E; H. R. Creal, Bridge Engr.

La., Lake Charles—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, plans expending \$41,000 to repair bridge over Calcasieu River at Lake Charles; Nicholls W. Bowden, State Highway Engr.

Miss., Martinsville—Copiah County Board of Suprs. plans overhead bridge over Illinois Central R. R. at Martinsville.

Mo., Ozark—State Highway Dept., Jefferson City, plans repairing lower bridge across Finley River, near Ozark, Christian County; T. H. Cutler, State Highway Engr.

Mo., St. Joseph—City, Louis V. Stigall, Mayor, plans toll-free cantilever bridge over Missouri River near St. Joseph; main span 750-ft. long, two anchor arms each 325 ft. long, connecting approaches with main span; 53-ft. high water clearance; trusses 100-ft. high at highest point; 20-ft. roadway, 4-ft. sidewalk, all concrete; approximate cost \$485,000; J. E. Kirkham, Consult. Engr., Pierre, S. D.; Wm. H. Finch, City Clk. 10-20

Mo., St. Louis—War Dept., Washington, D. C., reported, approved revised plans of John R. and Thoams J. Scott, E. E. Green and Baxter L. Brown for relocation of approach spans of bridge over Mississippi River near northern limit of St. Louis, connecting St. Louis with Mitchell, Ill.; original plans; Cantilever type, roadway 40 ft. wide, street part, 5200 ft. long, with 2 main river spans 700 ft. long and 13 spans of 200, 300 or 400 ft. each; estimated cost \$3,000,000; Baxter L. Brown, Consult. Engr., Merchants Laclede Bldg. 8-25

N. C., Durham—City plans reinforced concrete bridge over Goose Creek at Lottle St. crossing; two 10-ft. spans. Address City Clk.

Okla., Westville—State Highway Comm., Oklahoma City, and St. Louis-San Francisco Ry. Co., F. G. Jonah, Ch. Engr., St. Louis, Mo., plan overhead bridge over highway 3 mi. from Westville; cost \$11,605; eliminate grade crossing.

S. C., Columbia—War Dept., Washington, D. C., approved application of State Highway Dept. of South Carolina for bridge over Broad River and Columbia Canal, 1½ mi. from Columbia; under authority State law to replace existing temporary structure.

Tenn., Memphis—See Roads, Streets, Paving.

Tenn., Newport—Coke County and State Highway Dept., Nashville, considering bridge over French Broad River near Bridgeport.

Tex., Brackettville—Kinney County plans 8 bridges. See Roads, Streets, Paving.

Tex., Edinburg—Hidalgo County, Mission Dist. plans 2 bridges. See Roads, Streets, Paving.

Tex., Port Arthur—L. G. Frost, Const. Engr., of J. G. Billingsley Co., New Orleans, has plans for 2 types of Pleasure Pier Bridge: Vertical lift with horizontal clearance of 180-ft., cost \$171,000; swing type with same clearance, \$141,000; also has prepared drawings with 150-ft. clearance; J. P. Logan, Mayor. 10-20

Tex., Rusk—Cherokee County has available \$17,000 toward county's part for constructing bridge at Price's Switch across Neches River between Palestine, Anderson County, and Jacksonville, Cherokee County.

Va., Chuckatuck—Portsmouth-Nansemond Bridge Co., C. M. Jordan, Pres., 301 Twentieth St., Norfolk, let contract to Atlantic Bridge Co., Greensboro, N. C., for bridge across Nansemond River, between Drivers and Chuckatuck; contractors now assembling plant, constructing camp, driving test piles and vigorously pushing field operations for 2300-ft. steel and concrete bridge, including 200-ft. steel swing span, remainder steel beams and concrete superstructure; Virginia Bridge & Iron Co., Roanoke, will furnish steel and machinery; all other work with own forces; general materials not yet purchased; plans hard surfaced road from Drivers to Chuckatuck. 9-8

Va., Richmond—City, Board of Aldermen, Joseph E. Power, Pres.; Common Council, Fred H. Powell, Pres., considering constructing 2 bridges: From Ninth and Main St. to connect with Semmes Ave., eliminating all grade crossings; from Second and Hospital St., to Taylor's Hill.

Contracts Awarded

Arkansas—State Highway Comm., let contracts for 5 bridges. See Roads, Streets, Paving.

Ark., Dardanelle—Lakeside Bridge & Steel Co., North Milwaukee, Wis., has contract for 1700 tons structural steel for bridge over Arkansas River, Dardanelle, to be built by State Highway Dept.

Ark., Siloam Springs—E. C. Perry and Ellis Moore, have contract for 120-ft. concrete bridge across Sager Creek, at west edge of Twin Springs Park, 8-ft. wide, four 30-ft. spans; replace wooden bridge. Address City Clk.

Fla., West Palm Beach—R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, N. C., has contract to pave South Bridge; Jacob Boyd, County Engr.

Tex., Vernon—Wilbarger County, J. V. Townsend, County Judge, let contract to Leo E. Mills, 1029 W. Ninth St., Oklahoma City, for steel bridge over Pease River, 3 mi. northwest of Vernon; John B. Nabors, County Judge. 8-18

Canning and Packing Plants

Fla., Tampa—Kingsway Products, Inc., chartered; J. B. Beam, G. R. King.

Clayworking Plants

Okla., Oklahoma City—Acme Brick Co., Braniff Bldg., Carlisle Martin, Mgr., reported, install kiln, increasing capacity to 30,000 bricks daily.

Tex., Harlingen—Sinclair and Shane Co., Welasco, reported, establish face brick and tile plant.

Tex., Nacogdoches—A. W. A'Hare and F. R. Covert of Hamilton, reported, establish \$300,000 brick and tile plant.

Tex., Rio Grande—American Brick Co., Inc., Nassar Bldg., McAllen, will erect plant with daily output of 50,000 bricks and 20,000 tile; plans and specifications not out yet; frame with galvanized iron sides and roof. Address equipment proposals to company. See Want Section—Machinery and Supplies.

Tex., San Benito—W. B. Hinkly, reported, considering enlargement of brick manufacturing plant.

W. Va., Chester—Taylor, Smith & Taylor Pottery Co., reported, repair burned portion of plant.

Coal Mines and Coke Ovens

Ala., Birmingham—The National Coal and Coke Co., 2124 Ave. D, R. T. Daniel, Pres., reported, absorbed the Keystone Coal and Coke Co., Pioneer Bldg.

Ala., Birmingham—Markeeta Coal Co., capital \$10,000, incorporated; Charles F. DeBardeleben, Pioneer Bldg.; Prince DeBardeleben.

Ky., Louisville—Empire Fuel Co., capital \$10,000, incorporated; Alexander Taylor, 1012 Sale St.; Frances Symson.

N. C., Biltmore—Biltmore Coal and Land Co., capital \$100,000, incorporated; R. C. Shelton, W. P. Pollard, John B. Anderson, Watauga St., Asheville.

Tenn., Knoxville—Daddy's Creek Coal & Coke Co., incorporated; W. H. Sterchl, 2651 Magnolia Ave., B. J. Jones, W. C. Baker.

Concrete and Cement Plants

Ga., Atlanta—Company formed with R. V. Grayson, Healey Bldg., Pres.; S. J. Moss, 18 W. Fifth St., Sec., reported, expending about \$50,000 on erection plant to manufacture building tile; has secured patent rights and local franchise from W. E. Dunn Mfg. Co., Holland, Mich., machinery purchased is now under process of installation; initial output 100,000 tiles per month with plans to increase capacity.

Ga., Sandersville—The H. K. Ferguson Co., R. E. Summers, Ch. Contracting Engr., 4900 Euclid Ave., Cleveland, Ohio, advises plans for proposed plant of Georgia Portland Cement Co. are still in a preliminary stage. 5-5

La., New Orleans—Louisiana Cement Products Co. Inc., capital \$100,000, chartered; Lewis M. Dalgarn, Louisiana Bldg., Edgar J. Kelly, Robert E. Reynolds.

Cotton Compress and Gins

Miss., Yazoo City—Benton Gins, Inc., reported, acquired Yazoo Gin Co.

Tex., Ballinger—Farm Bureau Gin Co., capital \$30,000, incorporated; Frank Kemp, B. M. Batts, J. E. Fowler.

Tex., Corpus Christi—Federal Commerce Trust Co., Broadway and Pine St., St. Louis, Mo., offering \$250,000 first mortgage real estate and leasehold, serial 4% gold notes of Aransas Compress Co.; company has cotton compress plants at Robstown, Raymondville, Edinburg, Harlingen and Corpus Christi; purpose of issue is to complete and equip construction of 7-unit compress at Corpus Christi.

Tex., Maxwell—Schawe Gin Co., capital \$35,000, incorporated; H. H. Schawe, Mrs. Lydia Laas.

Tex., Richmond—Col. W. T. Eldridge, Sugar Land, reported, negotiating for tract of land on northeast side of Brazos River as probable site for cotton gin.

Tex., Tankersley—Reed and Philan, reported, rebuild gin, burned at loss of \$10,000.

Cottonseed-Oil Mills

Tex., Abilene—Abilene Cotton Oil Co. increased capital \$300,000 to \$500,000.

Drainage, Dredging and Irrigation

Fla., Stuart—Comms. of Martin-St. Lucie Counties Improvement Dist., receive bids Dec. 15 for dredging and rock removal. See Want Section—Bids asked. 10-20

Texas—Trinity Farms Co., Waxahachie, filed proposal to State Water Engineers, Austin, for appropriation of total of 160,000 acre-feet for three projects contemplating irrigation of Trinity River watershed acreage in Henderson, Anderson, Freestone and Navarro Counties.

Tex., Bonham—B. F. Williams, State Reclamation Engr., Austin, reported, approved plans of Fannin County Levee Improvement Dist. No. 1 to construct 28 miles ditches and small levees, reclaiming about 10,000 acres over flow valley lands, on the Bois d'arc Creek; estimated cost \$165,000.

Tex., Mission—John H. Shary and associates interested in formation new irrigation district to include 34,000 acres land including the Mission and Sharyland tracts; work includes concreting of canals in district and construction of new system.

Tex., Palestine—Comms. of Levee Dist. No. 1, reported, plan rebuilding drainage system for levee section, replace wood drains with iron pipe, etc.

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Alabama—Alabama Power Co., Birmingham, applied to Alabama Public Service Comsn., Montgomery, for permission to begin construction of steam electric plant, involving

expenditure of \$20,000,000; construction of first unit to begin as soon as permit is issued; cost of this unit \$5,000,000, and will have a capacity of 50,000 kw.; plant will be located at Gorgas, close to Warrior River; ultimate capacity 200,000 kw. or 270,000 hp.; construction by Dixie Construction Co., subsidiary of Alabama Power Co.

Alabama—Alabama Public Service Comsn., Montgomery, reported, approved consolidation of Gulf Electric Co., Mobile, and Houston Power Co., Newton, with Alabama Power Co., Birmingham, consolidated company to be known as Alabama Power Co. 10-27

Ala., Birmingham—City Comm., reported, considering whiteway street lighting installation.

Fla., Miami Shores—Town, reported, granted 30 yr. franchise to Florida Power and Light Co., Miami, for furnishing electric service, also for installation of street lighting system for 10 years.

Fla., Palmetto—Comms. Public Works, J. W. Summitt, Commr., reported, receives bids Nov. 22 for equipment for electric lighting system, including Diesel engine, generator, exciter, pumps, etc.

Georgia—Georgia Power and Light Co., Waycross, H. A. Nell, Gen. Mgr., advises that consideration is being given to plan to construct a 22,000-volt transmission line approximately 20 miles long from DuPont in Lanier County, to Lakeland, also in Lanier County, and Ray City in Berrien County; planned to furnish 24-hr. electric service and commercial power in both Lakeland and Ray City and retire present municipal system in both places.

Ga., Brunswick—City and Mutual Light & Water Co., Atlanta, closed contract for installation of white way on Newcastle St.

La., Oakdale—See Roads, Streets, Paving.

La., Ruston—Federal Public Utilities Co., Chicago, Ill., reported, negotiating for municipal power plant.

Mo., Rockville—City, reported, considering installation of white way system. Address The Mayor.

Mo., Cassville—Empire District Electric Co., Joplin, reported, construct power line south out of Purdy to Butterfield and Cassville.

Missouri—Harris, Forbes & Co., The National City Co., and Guaranty Co. of New York, offering \$45,000,000 5½% gold debentures due 1952 of Cities Service Power & Light Co.; company is a subsidiary of Cities Service Co., controls through stock ownership companies rendering electric light and power, gas and transportation service in 16 states, serving territories having a population in excess of 2,100,000; operating properties render public utility service to over 392,000 customers in more than 500 communities, including Toledo, Lorain, Mansfield, Warren and Sandusky, Ohio; Denver and Boulder, Colo.; St. Joseph and Joplin, Mo.; Knoxville, Tenn.; and Durham, N. C.; financing is part of plan for simplification of capital structure of Cities Service Power & Light Co. and subsidiaries; approximately \$2,000,000 of proceeds from sale of debentures will be used to provide additional working capital and entire balance will be used to provide funds, or to reimburse company for acquisition or retirement subsequent to June 30, 1927, of funded debt of this company and of funded debt or preferred stocks of subsidiaries.

Miss., Tchula—Mississippi Power and Light Co., Jackson, will rebuild entire distribution system using 2300-volt primaries; town will be served from high line of company and 13-kv. substation will soon be completed. 11-3

Miss., Water Valley—City, reported, let contract to G. S. Voltz, Ripley, Tenn., for water and power plant and power plant equipment.

Okla., Lambert—City, reported, voted \$25,000 bonds for transmission line from Lambert to Cherokee and distribution system in Lambert. Address The Mayor.

Okla., Strong—City, reported, voted \$25,000 bonds for transmission line from Hammon and distribution system in Strong; H. V. Jobe, Clk.

Texas—Central Power & Light Co., Frost National Bank Bldg., San Antonio, reported, granted permit by State Board of Water Engrs., Austin, for construction of main dam and series of smaller ones on Devil's River and use of water for power purposes; construction to begin at once; will involve development of 25,000 h.p. and cost about \$1,000,000; test holes for foundation of first dam have been dug; have signed contract with Illinois Pipe Line Co. (subsidiary of Mid-Kansas Oil and Gas Co.) for furnishing electric power for driving pumps on pipe line; 10 pump stations; each station will require 400

b.p.; pipe line will be extended from Del Rio to Ingleside; power transmission lines will also be constructed to number of towns and industries of border region of Texas; company also has application pending for permit to construct second large dam on Devil's River; additional power plant will be constructed at second dam.

Tex., Dalhart—West Texas Utilities Co., Abilene, reported, acquired Dalhart Public Service Co.

Tex., Dalhart—City will install street lights. Address The Mayor.

Tex., Fort Worth—City, reported, considering white way on Taylor St.; cost \$10,000; C. A. Winder, Supv. of Public Utilities.

Tex., Mexia—City, reported, soon call for bids for ornamental street lighting system. Address The Mayor.

Tex., Quitaque—West Texas Utilities Co., Abilene, reported, construct high tension line from Matador or Clarendon through Turkey to Quitaque, to be tied up with main transmission line.

Tex., Sabinal—Central Power & Light Co., Frost National Bank Bldg., San Antonio, reported, constructing connecting link from Sabinal to D'Hanis, L. E. Myers Construction Co., Allen Bldg., Dallas, in charge of work.

Tex., San Angelo—West Texas Utilities Co., Abilene, reported, expend \$500,000 for doubling capacity of power plant. Company wires: "Improvements to power station consist of 6000 kw. turbine complete with auxiliaries, additional boiler and extension to building; plans are being prepared by Sargent & Lundy, 72 W. Adams St., Chicago, Ill.; equipment contracts have not been awarded."

Tex., San Antonio—Wright Bros., 405 Main St., reported, has contract for complete street lighting system in Olmos Park Estates, development of North Side Investment Co., H. C. Thorman, 125 E. Travis St., Pres. 10-13

Va., Marion—Appalachian Power Co., Bluefield, reported, install white way lighting system on Main St.

Fertilizer Plants

S. C., Hartsville—Sowell Fertilizer Co. incorporated; R. E. Sowell, C. D. Sowell.

Flour, Feed and Meal Mills

Md., Hyattsville—National Health Products Corp., incorporated; Harold M. Dudley, L. Curtis Mortimer, Wilbur F. Dailey.

Tex., Big Spring—Chamber of Commerce, reported, interested in establishment of feed mill.

Foundry and Machine Plants

Md., Baltimore—Chesapeake Crane Corp., Chas. S. Hill, Pres., 702 Keyser Bldg., recently chartered; purchased assets of Chesapeake Iron Works; continue existing business; manufacture electric cranes.

Mo., St. Louis—Charles G. Kruckemeyer Machine and Parts Co., Minerva Ave., reported, erect \$50,000 plant addition, 1-story, factory type, steel structure, contain 7500 ft. floor space, equip with tools to handle heavy work; Truscon Steel Co., Youngstown, Ohio, Contr.

Mo., St. Louis—Bucks Stove & Range Co., 3500 N. Second St., reported, has permit for alterations to factory; Franz & Franz Construction Co., 4654 Loughborough St., Contr.; cost about \$25,000.

Tenn., Nashville—W. A. Griswold Co., capital \$100,000, incorporated; W. A. Griswold, 3403 W. End Ave., J. Warner Griswold, Geo. H. Armistead; establish plant to manufacture stoves and ranges; acquired building on Centennial Blvd., West Nashville; remodel and install machinery, work under way, to begin operation Jan. 1, 1928.

Tex., Houston—Hughes Tool Co., H. R. Hughes, Pres., 300 Hughes St., reported, let contract to Houston Ready-Cut House Co., Polk St., at \$75,000 to erect addition to machine shop building, 140x300 ft., heavy mill type construction, extra heavy concrete floor, sawtooth construction roof, steel sash, affording approximately 42,000 sq. ft. more floor space for manufacture oil well drilling tools, etc. 7-28

Gas and Oil Enterprises

Ala., Florence—L. P. Kleitz, Mgr., Muscels Shoals Gas Co., reported, install additional equipment in artificial gas plant; increase size of plant and extend mains.

Ark., Brinkley—Gulf Refining Co., Port Arthur, Tex., reported, erect gasoline warehouse.

Kv., Central City—J. Gish, Louisville, reported, acquired gas works.

La., Jennings—Salt Dome Oil Co., Inc., capital \$20,000, incorporated; D. C. Ritchie and Margaret C. Ritchie.

Md., Baltimore—Caspar Oil Corp., Citizens National Bank Bldg., incorporated; Harry C. Hand, Samuel C. Woods, Wm. M. Stevens.

Miss., Canton—City, reported, will soon grant gas franchise. Address The Mayor.

Mo., St. Joseph—St. Joseph Gas Co., reported, laying gas mains along East Hyde Park Ave., Noyes Ave., etc.

Oklahoma—Howe Snow & Co., Inc., Pearsons-Taft Co., Federal Securities Corp., Stroud & Co., Inc., R. E. Wilsey & Co. and Henry L. Doherty & Co. offering \$10,000,000 7% cumulative preferred stock of Empire Gas and Fuel Co. (Delaware), 60 Wall St., New York; company owns all capital stock, except directors' qualifying shares, of Cities Service Gas Co. and Empire Oil and Refining Co., and 68% of capital stock of Indian Territory Illuminating Oil Co.; Cities Service Gas Co. handles 100,000,000 cu. ft. of gas daily, and through 2200 miles of pipe line, supplies gas at wholesale to local companies serving over 135 cities and communities in Kansas, Oklahoma and Missouri; proceeds to be used to reimburse company in part for additions, betterments and improvements to properties of the subsidiaries.

Oklahoma—G. E. Barrett & Co., Inc., 120 Broadway, New York, Frederick Peirce & Co., offering \$3,000,000 ten-year 6½% secured gold bonds, Series A, of Union Gas Utilities, Inc., 1220 Grand Rapids National Bank Bldg., Grand Rapids, Mich., David A. Belden, Pres., St. Louis, Mo., James P. Reilly, Sec., New York; company through its subsidiaries operates in Kansas and Oklahoma; proceeds to be used in part for payment of portion of cost of capital stocks of Union Gas Corp., and of other subsidiaries to be acquired by Union Gas Utilities, Inc., and for other corporate purposes.

Oklahoma—Larutan Fuel Co., Wichita, Kan., reported, construct pipe line to tap Conway Springs pool; will connect with company's main line running from Northern Oklahoma to Wichita, Kan.

Oklahoma—Organization, reported, of Wirt Franklin Oil Corp., Ardmore, under laws of Delaware, with authorized capital of \$10,000,000; included in merger are all physical properties of Wirt Franklin, Cameron Refining Co., Knox Petroleum Co., Garvin Drilling Co., and Walter H. Gant; in addition to a 4000 bbl. capacity refinery, number of filling stations in southern Oklahoma, 2500 acres of producing leases in Graham, Fox, Sholom-Alchem, Franklin, Knoc, Duncan and Cement districts, etc.; Wirt Franklin, Pres.; P. C. Dings, Treas.; Ed. Galt, Sec.

Oklahoma—Community Natural Gas Co., Lone Star Gas Bldg., Dallas, Tex., reported, has natural gas franchise in Marietta, Lexington and Wayne.

Okl., Muskogee—Board of Directors of Chamber of Commerce, reported, endorsed proposal of C. N. Haskell to furnish gas to city through pipe line.

Okl., Oklahoma City—Federal Petroleum Royalty Corp., capital \$100,000, incorporated; J. A. Owens, G. R. Potter.

Tenn., Milan—Penn Tenn Oil Co., capital \$10,000, incorporated; G. H. Keaton, D. P. Bramley, Charles Smyth.

Texas—Amerada Petroleum Corp., Brownwood, reported, plans erecting 4 unit gasoline plant in Rosenfield district; cost \$75,000.

Texas, Port Arthur—Dutch Shell Oil Co., 65 Broadway, New York, or subsidiary company, reported, acquired large tract in and near Sabine from Kountze Bros., property includes hundreds of feet of harbor and waterway frontage; possibly construct tidewater refinery.

Texas—Prairie Oil and Gas Co., Ranger, acquired 640 acres for tank farm sites, are erecting 55,000, bbl. tanks, purchased from Petroleum Iron Works, have constructed 4 mi. of 6-in. pipe line; will build additional tanks as needed.

Tex., Alvin—City, reported, negotiating with Houston Gas Co., Houston, for gas system.

Tex., Beaumont—Great Southern Oil Co., capital \$50,000, incorporated; M. K. Fletcher, 2095 North St.; C. W. Bishop, G. S. Bland.

Tex., Borger—Phillips Petroleum Co., Bartlesville, Okla., reported, acquired plant of Alamo Refining Co.; will enlarge to capacity 7500 bbls. daily.

Tex., Brownwood—E. T. Green and John S. Owens, reported, acquired oil refinery; will remodel, capacity 750 bbl. daily; construct pipe line.

Tex., Brownwood—Central Texas Refining Co., capital \$25,000, incorporated; John S. Owens, E. T. Green.

Tex., Cooper—Community Natural Gas Co., Lone Star Gas Bldg., Dallas, reported, lay natural gas system.

Tex., El Paso—D. A. Bandeen of Chamber of Commerce, reported, announced that negotiations are under way for natural gas pipe line from Artesia, N. M. fields by outside capitalists.

Tex., Fort Worth—Renee Oil Co., incorporated; Walter A. Todd, R. R. Rhodes, 1204 Buck St.; G. F. Rhodes.

Gas., Houston—Houston Natural Gas Co., Petroleum Bldg., reported, construct \$100,000 domestic gas supply system.

Tex., Malone—Community Natural Gas Co., Lone Star Gas Bldg., Dallas, Tex., reported, install gas system; also supply gas to Penelope, Hubbard and Dawson.

Tex., Pearsall—City, reported, granted 50-yr. natural gas franchise to Mariss Finance Co., San Antonio; will construct pipe line from gas fields near Hondo.

Tex., San Angelo—Transcontinental Oil Co., Tulsa, Okla., reported, construct 425-mile of 10-in. pipe line from Pecos County to Houston; line to be built by United Producers' Pipe Line Co. (subsidiary); capacity 30,000 bbls.; cost, including terminal storage, \$12,500,000. Company wires: "No official decision made on building proposed line."

Tex., San Antonio—Laurel Petroleum Co., Inc., 4403 S. Presa St., increased capital \$25,000 to \$50,000.

Tex., Silverton—West Texas Gas Co., Amarillo, reported, applied for gas franchise.

Tex., Somerset—Texas Petroleum Products Co., 912 S. Medina St., San Antonio, reported, acquired Witherspoon refinery and wholesale distributing business of Witherspoon Refining Co., Frost Bank Bldg.; increased capital, \$30,000 to \$200,000.

Tex., Thalia—Culberson Brothers, Dallas, reported, have natural gas franchise.

Va., Hopewell—City, reported, plans granting gas franchise. Address The Mayor.

Va., Norton—Central Oil Co., capital \$50,000, incorporated; W. T. Rorrer, J. E. Cunningham, Roger S. Warren.

Ice and Cold-Storage Plants

Ala., Phenix City—J. P. Blake of Blake Coal and Ice Co., Knights Sta., Columbus, Ga., reported, plans building \$20,000 ice plant at Twelfth Ave. and S. Railroad St., 1-story, 35x55-ft., brick, electrically operated.

Ga., Claxton—Claxton Ice Co., C. B. Romberg, Sec., will erect 50x70-ft. plant, brick, cement floor, composition roof; install \$15,000 machinery furnished by Frick Co., Waynesboro, Pa.; construction by owner. 11-3

Md., Crisfield—Consumers Ice Co. changed name to Consumers Public Service Co.

Miss., Aberdeen—Eugene Sykes, reported, plans building 25-ton capacity ice plant, 250x75 ft., brick construction.

N. C., Durham—Durham Public Service Co., reported, acquired City Ice and Coal Co.

Okl., Muskogee—Southern Ice & Utilities Co., J. S. Harris, Gen. Mgr., Sapulpa, reported, acquires Peoples Ice and Fuel Co.; also move district offices to Muskogee.

Tex., Quitaque—West Texas Utilities Co., Abilene, Tex., reported, plans enlargement of properties, erect modern office building and ice plant; Spanish type; move ice plant from present location.

Tex., Victoria—New York Buyers Assn., C. S. Guilhem, Pres., 334 W. Kingshighway, San Antonio, reported, acquired cold storage plant of Hill-O'Connor Co.; E. W. Jones will have charge plant.

Iron and Steel Plants

Md., Baltimore—Baltimore Copper Smelting and Rolling Co. plans extension to existing copper sheet rolling mill, corner Fifth Ave. and Eighth St., 1-story, 108x396-ft., also 1-story, 42x140 ft., steel warehouse on Clinton St.; estimated cost \$165,000; McClintic-Marshall Co., Pittsburgh, Pa., has steel contract; remainder of work by company forces.

Land Development

Ala., Birmingham—Birmingham-Alabama Realty Co., Inc., Exchange Bldg., John P. Shaddick, Pres., are developing Mason-Dixon City, tract of 4000 acres on State Highway; will grade and pave streets, sidewalks and curbing; expend from \$4,000,000 to \$8,000,000; improvements to be made and now under construction include: Electric lights, water works with 100-lb. pressure, lake for boating and swimming, 18-hole golf course and clubhouse, moving-picture theater, moving-picture studio; main street 100 ft. wide with white way, now being paved; 15-ft.

sidewalks on Main St.; sidewalks on side streets administration building; curbs on all parkways and streets; Pierce-Robinson, Town Planners, Birmingham and Toledo, O.; Turner & McPherson, Archts., American Trust Bldg., Birmingham; Jerry Gwin, Gen. Contr., Age-Herald Bldg., Birmingham; R. M. Stewart, Constr. Engr., Birmingham. 11-3

Ala., Birmingham—Conover-Powell Realty Co. incorporated; E. D. Conover, M. Conover.

Ala., Birmingham—D'Orr Realty Co. incorporated; E. Goodwin, G. D. Coburn, 114 N. Hawkins St.

Ala., Birmingham—Ashville Realty Co. incorporated; Pearl C. Molony, Carl Enslin, 1215 Beech St.

Ala., Birmingham—Baugh Development Co., capital \$25,000, incorporated; R. H. Baugh, 2205 Highland Ave.; M. L. McConnell.

Fla., Arcadia—Arcadian Country Club, Inc., chartered; James K. White, Harry E. Gill.

Fla., Clearwater—Royal Properties, Inc., chartered; F. J. Booth, H. W. Bivins.

Fla., Daytona Beach—E. L. King, Winona, Minn., will develop 180-golf course, build \$40,000 clubhouse; total expenditure \$150,000; James Sheppard, Sr., Landscape Archt., Daytona Beach; T. K. Apgar, Gen. Contr., Daytona Beach. 11-3

Fla., Hollywood—Ketoctin Nursery Co., Inc., chartered; A. L. Gray, L. B. Shutt.

Fla., Jacksonville—Willwin Corp. incorporated; E. V. Toomer, Graham Bldg.; C. P. Gilliard.

Fla., Miami—431 N. W. Third St. Corp., incorporated; Thelma Cain, Helen King.

Fla., Miami—Key Largo Holding Co. incorporated; T. J. Lummus, H. F. Ward, 1311 Alhambra Circle.

Fla., Ocala—Florida Landscape Co., Jacksonville, has contract for landscaping property of Standard Oil Co., Magnolia and May Sts.

Fla., Orlando—Orange County Development Co. incorporated; A. E. Carpenter, G. B. Fishback.

Fla., Orlando—Barkdull Holding Co., Inc., chartered; A. T. Barkdull, 423 Parklake Circle; Thomas B. Everhart.

Fla., Sarasota—The Astral Co. incorporated; Roswell King, First Bank and Trust Bldg.; Paul M. Souder, Whitfield Estates.

Fla., Sebring—Sebring Golf and Country Club, Inc., chartered; C. N. Thompson, J. O. Wilson.

Fla., St. Augustine—Herbert E. Wolfe, Oak St., reported, plans subdivision on Magnolia Ave.

Fla., Tampa—Glover-Byrne, Inc., chartered; C. P. Glover, 2627 N. Dundee St.; J. E. Byrne.

Fla., Tampa—Morningside Properties, Inc., chartered; M. G. Gibbons, Jr., 823 S. Delaware Ave.; Charlotte M. Rider.

Fla., Tampa—Tumblin Holding Co., capital \$10,000, incorporated; J. S. Tumblin, 317 S. Jefferson St.; J. H. Ireland, Winifred Tumblin.

Fla., Umatilla—C. Z. Osborne Groves Co. incorporated; C. Z. Osborne, Ruth Osborne.

Fla., West Palm Beach—Eddy's Holding Co., capital \$10,000, incorporated; Ed Buckholtz, Avondale Rd.; E. T. Osteen.

Fla., West Palm Beach—Lester H. Abrams Co. incorporated; L. H. Abrams, L. L. LaRue.

Fla., Winter Park—Winnebago Groves, Inc., Box 264, H. S. Lyons, Mgr., is developing 40 acres in citrus fruits; only small improvements contemplated present time; later more acreage will be developed. 11-3

Fla., Yalaha—Florida Greens Corp. incorporated; C. D. Towers, W. H. Rogers.

Ky., Lexington—Blue Grass Development Co., Inc., J. C. Hurst, Pres., 642 Central Ave., will develop 30 acres for cemetery; engineering completed, roads under construction, macadam streets, formal gateway, iron fences; stone and marble mausoleum; expend \$200,000; A. W. Hardin & Co., Constr. Engr., Southern Trust Bldg., Louisville, Ky. See Want Section—Miscellaneous.

La., Mandeville—Guy L. Deano is developing subdivision on Monroe St.; let contract to Eugene Esquinance, Mandeville, for gravel streets.

La., New Iberia—The Lawtonia Co., Inc., capital \$30,000, incorporated; H. H. Winters, Walter J. Burke, Edward T. Weeks.

La., New Orleans—Winter Gardens, Inc., Wm. T. Coats, Pres., has 21,000 acres; will develop 7,000 acres in 10-acre farms with orange orchard of 5 acres. 10-20

La., Shreveport—The Bowen Co., capital \$10,000, incorporated; Fred W. Bowen, Giddens Lane Bldg.; V. L. Bowen.

Md., Baltimore—Rigger Realty Co., incor-

porated; Wm. L. Rigger, 4 St. Paul St.; Henry M. White, Fidelity Bldg.; Henry B. Thomas, Baltimore and St. Paul Sts.

Md., Baltimore—Empire Realty Co., Equitable Bldg., acquired 237 acres on Washington Boulevard; develop subdivision.

Md., Baltimore—Potomac Development Co., Inc., 4141 Dalrymple Ave., incorporated; Wm. Magazine, 4141 Dalrymple Ave.; Harry S. Herman, Equitable Bldg.

Md., Baltimore—Realty Sales and Development Co., 17 E. Saratoga St., incorporated; Julius Litau, 30 McCurley St.; W. Wilson White.

Md., Baltimore—Modern Park Development Co., U. S. F. & G. Bldg., incorporated; Edgar Allen Poe, J. Kemp Bartlett, Jr., Francis A. Michel.

Md., Baltimore—Finch Realty Corp., 1000 Edmondson Ave., incorporated; Joseph Lipskey, Reuben Queen, Charles W. Mulligan, 6 E. Mulberry St.

Md., Baltimore—Selkirk Realty Co., 1125 Fidelity Bldg., incorporated; Alexander S. Gage, James J. McGrath, 131 N. Luzerne St.; Cary D. Hall, Jr.

Md., Baltimore—The Katz Corp., 22 E. Lexington St., incorporated; Stanley K. Harman, 208 E. Lexington St.; John W. Mentzer, Louis Croner.

Md., Baltimore—Local Realty Co., 2313 Allendale Rd., incorporated; Frank L. Applestein, Baltimore and Hanover Sts.; Harry M. Applestein, R. Legare Webb.

Md., Hyattsville—Capital Apartment Corp., incorporated; T. Howard Duckett, Charles K. Mallory, Franklin P. Williams.

Mo., Kansas City—W. C. Glover, 116 W. 67th St., reported, develop subdivision on Woodson Rd.; construct lake with 3 miles of shore line and area of 35 acres.

Mo., St. Louis—Stedelin Brothers, 823 N. Fourth St., developers of Grand-Gravois Park, having streets graded in subdivision; will soon begin work on concrete streets and alleys, sidewalks, install water, sewer, gas and electricity; David P. Leahy, Agt., Eighth and Chestnut Sts.

N. C., Asheville—Robert J. Lewis, reported, develop 15-acre North Side Cemetery on Beavertown Road; expend \$100,000 for initial outlay; construct 4 entrances, mausoleum and chapel, roads; will have entire tract landscaped.

Okla., Altus—J. Ben Russell, reported, acquired 40 acres; develop subdivision; construct streets, install water, sewers, electric lights, etc.

Okla., Tulsa—Sulphur Springs Fountain Colony, Inc., chartered; A. W. Fountain, Sulphur Springs, Ark.; W. J. Fraley, Central Natl. Bank Bldg.

S. C., Georgetown—W. N. Sehren and associates, reported, acquired 400 acres.

S. C., Greenville—Southern Investment Corp., incorporated; J. H. Hall, J. E. Hall, Mills Bldg.

S. C., Spartanburg—Fred Douglas Land and Realty Co. incorporated; W. M. Foster, J. B. Walker.

Tenn., Chattanooga—Chattanooga-Lookout Mountain Park, Adolph S. Ochs, Pres., reported, having property surveyed for landscaping, comprising about 8 miles; county plans expending \$800,000 during next 2 years in improvements to approaches to park, including bridge and highway work.

Tex., Cotulla—Francis C. McCarty, Chicago, Ill., reported, acquired 14,000 acres in Winter Garden district; develop subdivision; use shallow well system of irrigation, subdivide into tracts of 40 acres; will handle development work under name of Winter Garden Estates; J. C. Foster, Laredo, will make surveys; K. A. Porter, in charge of development; construct 40 miles of roadways; develop townsite of LaSalle.

Tex., Fort Worth—Citizens Realty Co., capital \$50,000, incorporated; W. D. Morris, 1936 Sixth Ave.; H. E. Valentine, Jr., 1825 Western; W. H. Shelby.

Tex., Grapeland—Grapeland Country Club, reported, develop 150 acres; build clubhouse; install water, graveled driveway around lake, bathing beach, etc.

Tex., Houston—Henry O. Cosby, 342 West Bldg., are developing 150 acres for homesites and pleasure resort; construct 100-ft. pier and pavilion, shell streets, entrance gates, water well or water system; expend \$15,000; Geo. S. Anderson, 1301 1/2 Anita St., Contr. for streets. 10-27

Tex., Houston—Rosewood Park Cemetery, J. G. Warfield, Mgr., reported, let contract to Scott & Howard for grading and excavating; Parker Bros., 1903 Main St.; for shelling streets and by-paths.

Tex., Houston—Lyman C. Reed, Hibernia

Bldg., and A. L. Hogan, 2201 S. Lopez St., both New Orleans, La., reported, acquired 130 acres in Highland Farms.

Va., Alexandria—F. H. Smith Co., capital \$10,000, incorporated; C. Elbert Anadale, G. Bryan Pitts.

Va., Lynchburg—John M. Miller, Martinsburg, W. Va., reported, develop subdivision near Peakland, including 25-acre park.

Va., Norfolk—Wells Amusement Co., Inc., Otto Wells, Pres., 509 Dickson Bldg., is developing Ocean Pines subdivision at Ocean View; install water, sewers, paving, lighting, etc.

Lumber Enterprises

Ark., Pine Bluff—J. A. McLeod, V. Pres. and Gen. Mgr. Pine Bluff Lumber Co., reported, acquired complete control of the Company, by purchasing all holdings of other stockholders, probably expand.

Ark., Pine Bluff—McGehee Realty & Lumber Co., capital \$150,000, incorporated; H. H. McGehee, Pres.; C. G. Custer, Sec.; reported, leased 100x150-ft. building at Third and Mulberry St.

Miss., Jackson—Hazlehurst Lumber Co., capital \$10,000, incorporated; Jno. M. Hartfield, N. State & Fairview; Garner W. Green, 647 N. State St.; Clara Melton.

North Carolina—M. O. Galloway, Waynesville, N. C., reported, purchased 933 acres Government timber on Stony Fork.

S. C., Sumter—Galloway-Pease Lumber Co., main office, 435 N. Michigan Ave., Chicago, Ill., reported, plans erecting band mill; cost about \$150,000.

Tenn., Memphis—Harry Kohn Lumber Co., 49 S. Third St., capital \$25,000, incorporated; Harry Kohn.

Tex., Laredo—John O. Buenz Lumber Co., capital \$40,000, incorporated; E. H. Buenz, L. Q. Buenz, J. A. Lea.

Mining

Mo., Sheldon—Missouri Asphalt Refining Corp. have about 1000 acres to be developed; output 2000 tons daily; purchase equipment about Dec. 1; Ernest Pearce, Const. Engr. See Want Section—Mch. and Supplies. 11-3

Texas—Bureau of Mines, Dept. of Commerce, Washington, D. C., reported, let contract to Pennsylvania Drilling Co., 1812 W. Carson St., Pittsburgh, Pa., to drill fifth potash test well on Harris Bros. ranch in Crockett County.

Tex., Fort Worth—Black Range Mining Corp. increased capital, \$30,000 to \$200,000.

Miscellaneous Construction

Fla., Punta Gorda—Dock—City, D. F. Smoak, Mayor Commr., receives bids Dec. 1 for municipal dock, channel and turning basin; C. K. D. d., City Mgr. See Want Section—Bids asked.

La., Ferriday—City voted bonds for construction of levee. P. H. Corbett, Mayor. See Financial News—Bond Issues Proposed. 9-29

La., Ferriday—Staten & Wilds, Wildsville, La., reported, has contract to repair and reconstruct levee; cost about \$38,000.

La., Marksville—Mississippi River Comsn., Fourth Dist., W. H. Holcombe, Major, Corps of Engrs., Dist. Engr., River Front at Burdette St., New Orleans, receives bids Nov. 15 for work in Vick Crevasse Levee. See Want Section—Bids asked.

Md., Baltimore—Port Development Comsn. receive bids Nov. 23 for preliminary work and building pier substructure for McComas St. terminal improvements; the J. E. Greiner Co., Const. Engr., Lexington Bldg. See Want Section—Bids Asked. 11-3

Miss., Greenville—Mississippi Levee Comms., reported, plans strengthening levee at Leavenworth's sawmill, in southern part of city.

Missouri—Woods Brothers Construction Co., Lincoln, Neb., reported, has contract at \$267,173.20 for 6000 feet of piling, dikes and hurdles in Mississippi River at Missouri Sister Island; U. S. Engineers, care of Maj. John C. Gotwals, Ch. Engr., 428 Customhouse, St. Louis, Mo.

Tenn., Clinton—Standard Drilling Co., 300 Madison Ave., New York, reported, has contract to core drill for dam located above Andersonville Rd. bridge on Lewallen's Island.

Tenn., Clinton—Survey for the Cove Creek Dam completed; proposed dam to be 200-ft. high and conserve lake of water 70 miles up stream; cost about \$20,000,000; when completed boats can operate all year from Clinton to New Orleans. Address U. S. Corps Engineers, War Dept., Washington, D. C.

Tex., Amarillo—Mausoleum—H. W. Underhill Construction Co., 235 N. Waco Ave.,

Wichita, Kan., has contract for mausoleum for Community Mausoleum Co., Inc.; 2016 Main St., Kansas City, Mo.; Carthage stone exterior and Vermont marble interior; cost about \$100,000. 11-3

Miscellaneous Enterprises

Ala., Birmingham—Labor Advocate Publishing Co., capital \$25,000, incorporated; J. L. Hurst, 930 Alois Ave.; G. M. Griffin.

Ala., Birmingham—Southern States Chemical Co., capital \$203,000, incorporated; B. F. Tyler, Glen Iris Park; P. R. Owens.

Ala., Birmingham—White's Transfer and Storage Co. incorporated; J. C. White, 621 S. 45th St.; Ethel M. White.

Ala., Birmingham—Brice-Estes Building Co. incorporated; Tom G. Estes, H. A. Brice, 2638 Highland Ave.

Ala., Mobile—Benson-Beckman Paint Co., 102-04 N. Commerce St., let contract to Doullut & Ewin, Meaher Bldg., at \$45,000 to erect buildings; one 80x200-ft. with mezzanine floor and one 50x100-ft., 1-story; steel and concrete, steel roof, concrete floor; install \$25,000 equipment; manufacture paint, daily output 2,000 to 3,000 gal.; electric motors furnished by Cox Electrical Co., elevator by Mobile Elevator Co., 66 St. Michael St. See Want Section—Machinery and Supplies.

Ala., Tuskegee—City, G. B. Edwards, Mayor, reported, let contract to American-LaFrance Fire Engine Co., Inc., Elmira, N. Y., for triple combination fire truck; contemplate erecting fire engine house on N. Main St.

Ark., Little Rock—Charles J. Schay, 2607 W. 14th St., has contract to erect 1-story, 50x150-ft. building, brick, semi-fireproof, concrete floor, Barrett tar and gravel roof, cost about \$20,000; to be occupied by Enterprise Harness Co., Capitol Ave. and Spring St.; Wm. Dill, Archt., 609 Boyle Bldg. 11-3

Ark., Van Buren—Hugh Parks and James Parks of Fort Smith, reported, acquired Van Buren Press-Argus, Main St.; continue to operate in present location.

D. C., Washington—Booker T. Washington Hotel Corp., capital \$150,000, incorporated; Morris Wolf, Harry Kapneck, Cecil A. Fetters, 1539 I St. N. W.

Fla., Cocoa—New Rockridge Hotel Co. incorporated; Michael Bressler, A. S. Quassman.

Fla., Daytona Beach—Cryer Clothing Co., S. Beach St., capital \$15,000, incorporated; J. M. Cryer, Claude G. Varn, Woolworth Bldg.; Stuart Peirce.

Fla., Deland—Dr. Chas. B. McFarren, editor of McFarren's Health Bulletin, Chicago, Ill., reported, moved establishment from Chicago; will publish magazine under new name of The National Health Review; business office located in Deland; editorial office in Orlando.

Fla., Jacksonville—Consolidation of Palmer Creamery, Magnolia St., and Seminole Milk Co., 342 Riverside Ave., reported, both companies to be operated under direction of Northwestern Milk and Ice Cream Co., Minneapolis, Minn.

Fla., Jacksonville—Barrett Food Products Co., C. O. Barrett, Pres., 346 Luckie St., Atlanta, Ga., reported, plans establishing branch factory; manufactures and distributes peanut butter, potato chips, etc. under name of Gardner Products label.

Fla., Miami—Bakerite Breadery, Inc., chartered; Francis Cohen, A. Tenenbaum, 332 N. Miami Ave.

Fla., Ocala—Kelly Rusk Construction Co., capital \$50,000, incorporated; S. S. Spencer, D. Robinson.

Fla., Sarasota—Florida Crispette Co. incorporated; A. M. Traylor, L. A. Traylor.

Fla., Sanford—T. R. Higgins, R. J. Holly, Frank Evans, applied for charter for Sanford Signal, publish weekly paper.

Fla., St. Petersburg—City Coman., reported, let contract to American-LaFrance Fire Engine Co., Inc., Elmira, N. Y., at \$13,000 for new triple pumping engine, capacity 1000 gal.; to the Eureka Fire Hose Co., for 3,000 ft. fire hose; J. T. McNulty, Ch. of Fire Dept. 10-13

Ky., Calhoun—Calhoun-Rumsey Bridge Co., reported, acquired franchise for operation of Calhoun-Rumsey ferry across Green River.

Ky., Hopkinsville—Wadsworth-Campbell Box Co., capital \$50,000, incorporated; Harold L. Wadsworth, John A. Campbell, S. D. Blaney.

Ky., Lexington—Personal Health Service Laboratories incorporated; W. L. Heizer, W. R. Pinnell, 601 Guaranty Bank Bldg.; Ethel Ellis.

Ky., Louisville—Louisville Storage Co.,

Floyd and G Sts., increased capital to \$12,000.

Ky., Louisville—Electrical—O. J. Allen & Co., capital \$10,000, incorporated; O. J. Allen, Coleman Bldg.; W. E. McGregor, E. F. Reagan.

La., Alexandria—Standard Printing Co., Inc., increased capital, \$50,000 to \$100,000.

La., Baton Rouge—Ramires-Jones Printing Co., 407 Lafayette St.; Joe Ramires, Pres., reported, soon begin construction new \$40,000 plant on Lafayette St., 2-story, 60x123-ft., fireproof, saw tooth roof, install automatic sprinkler system; use equipment in present plant.

La., New Orleans—Giarratano Pharmacy, Inc., chartered; Frank Giarratano, Annie Giarratano.

La., Shreveport—Standard Milk Products, Inc., capital \$25,000, chartered; J. D. Smith, 2925 Holly St.; H. K. Oilphint, 184 Oaksley Drive; Geo. A. Bridges.

Md., Baltimore—C. J. Hamilton, V. Pres., Security Storage and Trust Co., North Ave. near Charles St., and associates, has purchased storage business of the Security Storage and Trust Co. and will organize new company to have capital from \$600,000 to \$800,000; will take over Enterprise Carpet Cleaning and Storage Co.; purchased storage business and building from Century Trust Co.

Md., Baltimore—L. Gordon & Sons, Inc., 207 Fallsview, leased 25,000 sq. ft. floor space in building corner Paca and Ostend St.; installing new machinery; manufacture paper boxes. 10-27

Md., Baltimore—Baltimore Hide and Fur Co., 15 W. Camden St., capital \$25,000, incorporated; Albert Langsner, 12 E. Barre St.; Paul Berman, Hearst Tower Bldg.; Morris A. Baker.

Md., Baltimore—Building Supplies—Baltimore Cement & Supply Co., 235 Equitable Bldg., capital \$50,000, incorporated; Howard E. Gorsuch, 2509 Druid Hill Ave.; Chas. H. Thompson, 58 Mallow Hill Rd.; John L. Martin.

Md., Baltimore—National Weaving Mills, Inc., 2019 Orleans St., chartered; Allan Eli Cohan, Dr. Joseph Lipsey, 1800 Pennsylvania Ave.; Jacob Rodman.

Md., Baltimore—Madison Square Amusement Co., 848 N. Howard St., capital \$10,000, chartered; Milton J. Fitzsimmons, 2820 St. Paul St.; Gertrude M. Fitzsimmons, H. Margaret Neidhardt.

Md., Baltimore—Razor Blades—Apex Manufacturing Corp., 909 Calvert Bldg., chartered; Samuel Matz, Bernard Goldberg, 524 W. Mulberry St.; Margaret E. Fite.

Md., Baltimore—Mercantile—Artercraft Co., Inc., 1102 S. Charles St., chartered; Abe Eliscu, Geo. W. Elgner, 109 W. Baltimore St.; Theresa Eliscu.

Md., Baltimore—Mercantile—Mohr Co., Inc., 1210 McCulloh St., chartered; Isabella Mohr, Roy B. Mohr, Bertha Essex.

Md., Baltimore—Maryland Novelty Manufacturing Co., Inc., 613 W. Baltimore St., chartered; Lewis P. Wolf, 1204 Longwood St.; Joseph M. Lazarus, 4218 Park Heights Ave.; Morris Paul.

Md., Baltimore—Merchandise—D. R. S. Company, Inc., 327 Calvert Bldg., chartered; Gustave Rhodey, 5119 Queensberry Ave.; Harry W. Darney, David C. Smart.

Md., Baltimore—Oil Burners, etc.—The Arcoll Co. of Maryland incorporated; Reuben Oppenheimer, Citizens Natl. Bank Bldg.; Eli Frank, Jr., J. Charles Gutberlet, 4023 E. Franklin Ave.

Md., Baltimore—Ellicott Machine Co., 1111 Bush St., incorporated; Huntington Cairns, John W. Avirett, Leslie E. Mihm.

Md., Baltimore—Plastic Decorating Co., 2021 Longwood St., chartered; Morgan H. Evans, Harry W. Shenton, Munsey Bldg., J. Calvin Carney, 3 E. Lexington St.

Md., Baltimore—Clothing—The Garmentaria, Inc., 4 N. Howard St., chartered; Mike Finger, Mary Finger, Buena H. Finger.

Md., Baltimore—Modern Park Development Co., U. S. F. & G. Bldg., incorporated; Edgar Allen Poe, J. Kemp Bartlett, Jr., F. A. Michel, U. S. F. & G. Bldg.

Md., Baltimore—Dietrich Bros., Pleasant St., have contract for 600 tons steel for building of Fairfield Farms Dairy Co., Inc., Front and Exeter St. 10-6

Md., Hagerstown—Try-Me Beverage Co., incorporated; C. Elmer Kiracofe, Grayson M. Gruber, Peter A. Allen.

Md., Hyattsville—Harvey Dairy Co., Inc., capital \$20,000, chartered; Samuel H. Harvey, Arthur H. Seidenspinner, Kenneth A. Clark.

Md., Landover—Dreamland Press, Inc., 10 Annapolis Rd., chartered; Della D. Marshall,

Murray L. Marshall, Vertha L. Hanford.

Md., Riverdale—Palace Laundry, Inc., chartered; Geo. P. Marshall, Lewis L. Hogewood, Byron G. Carson.

Md., Sudlersville—Sudlersville Fire Co., Inc., chartered; Arthur J. Truitt, J. Price Johnson, C. Hayden Metcalfe.

Md., Upper Marlboro—Casing for Skinless Frankfurter—Viking Eastern Sales Corp. chartered; Andrew D. Loffler, Fritz W. Knudsen, Andrew D. Loffler, Jr.

Miss., Jackson—Dr. E. A. May, Lamar Bldg., reported, let contract to McGee & Wetmore, N. O. G. N. Station, to erect building on Amitee St.; 1-story, 56x80 ft. brick; install skylights; cost about \$15,000; to be occupied by Kolb Cleaning & Tailoring Co., 147 E. Capitol St., and the Duco Auto Painting Co., 220 S. President St.; N. W. Overstreet, Archt., Miss. Fire Insurance Bldg.

Miss., Jackson—Gulport Engineering Co., capital \$10,000, incorporated; W. E. Guild, 734 Fairview Ave.; E. A. Knight, 11 Lynncrest St.; Garner W. Green.

Miss., Jackson—Carmichael Tile Co., 166 E. Capitol St., capital \$25,000, incorporated; Dan L. Carmichael, J. Floyd Carmichael, both Atlanta.

Miss., Kosciusko—Pet Milk Co., Arcade Bldg., St. Louis, Mo., reported, let contract for sinking deep well, work to begin at once; digging of well first step in construction of \$500,000 milk plant.

Miss., Moss Point—Southern Paper Co., E. H. Mayo, Gen. Mgr., let contract to Combustion Engineering Corp., Combustion Engineering Bldg., New York City, for changing boiler plant from fuel oil to coal burning equipment, cost about \$125,000.

Mo., Adrian—City voted bonds for purchase fire-fighting equipment. See Financial News—Bond Issues Proposed.

Mo., Cape Girardeau—Walther's Undertaking Co., capital \$12,000, incorporated; B. A. Walther, G. C. Walther, T. H. Hohler.

Mo., Jackson—Roziers Cash Stores, capital \$20,000, incorporated; Ernest Hacker, Jackson; Jules R. Rozier, St. Marys; Louis A. Loiseau, Perryville.

Mo., Jefferson City—Greenhouse—Hugo Busch, Propr., Busch Floral Co., Madison and Dunklin St., erecting \$15,000 rose house in Washington Park, 40x200-ft., use for growing of roses, capacity 8,000 to 10,000 plants; all materials furnished by American Greenhouse Manufacturing Co., 159 N. State St., Chicago, Ill.

Mo., Joplin—Allis Building Co., incorporated; Barney L. Allis, 2420 Linwood Blvd., H. C. Nanson, Jr., both Kansas City, Grover C. James, Joplin, Joplin Natl. Bank Bldg.

Mo., Kansas City—Electric Appliance Co., 1329 Oak St., capital \$10,000, chartered; Arthur M. Lutes, 4317 Mercier St., Grace W. Lutes.

Mo., Kansas City—McDonald Paint Co., incorporated; Harry S. Simpson, 5107 Olive St., D. L. Sheffrey, 814 E. 43d St., F. P. Parker.

Mo., Kansas City—Rubber Products, Inc., chartered; F. A. Laughhead, Topeka, Kan.; Burr R. Harrant, Leslie J. Lyons, 1003 Continental Bldg., both Kansas City.

Mo., Kansas City—Coronado Theater and Hotel Co. incorporated; A. E. Elliott, M. H. Siegfried, I. A. Smith, all Independence, Mo.

Mo., Kansas City—Porter Syrup & Preserving Co., capital \$100,000, incorporated; Edward M. Cox, 412 E. 41st St.; M. B. Coffey; Lloyd H. Smith, 2115 E. 35th St.

Mo., St. Joseph—Parda Candy Co., capital \$25,000, incorporated; W. R. Doane, 632 S. Eighth St.; O. L. Duty, E. M. Anderson.

Mo., St. Joseph—Pacific Coast Fern Co. incorporated; B. W. Murphy, Seventh and Francis Sts.; E. S. Murphy, John Slater.

Mo., St. Louis—Sprague Printing Co., Warren R. Sprague, Pres., 204 N. Third St., reported, acquired property cor. Nineteenth and Locust St., remodel for printing plant.

Mo., St. Louis—Liberty Bakery Co., Inc., 1937 Biddle St., chartered; Mandel Rich, Harry Palkes, 5119 Palm St., Philip Hart, 5446a Wells St.

Mo., St. Louis—Food Supplies—Swift Products Co., capital \$50,000, incorporated; Doddridge Farrell, 5376 Waterman St.; Geo. W. Swift, M. E. O'Loughlin.

Mo., St. Louis—National Candy Co., V. L. Price, Pres., Federal Commerce Trust Bldg., let contract to Gamble Construction Co., 620 Chestnut St., for erection plant cor. Bingham and Gravois St.; sub-contracts to J. Sheehan Plumbing Co., 1609 Olive St., and Crowder Bros. Automatic Sprinkler Co., 2212 Washington St. 5-19

N. C., Biltmore—Dorian Music Co., Inc., capital \$100,000, chartered; H. O. Miller,

Lone Pine Rd., Biltmore; L. B. Dorlan, Asheville.

N. C., Charlotte—Advertising, etc.—Sullivan Sales Corp., Inc., capital \$20,000, chartered; Nesbitt Sullivan, Alvin N. Sullivan, L. Sullivan, 1303 N. Pegram St.

N. C., Greensboro—Clothing—Tom Walker Co., capital \$50,000, incorporated; P. A. Walker, A. G. Sutherland, 105 Bishop St.; A. C. Davis.

N. C., High Point—Watterman Plumbing and Heating Co., capital \$50,000, incorporated; F. A. Watterman, A. E. Taplin, W. W. Smith.

N. C., Whitakers—Whitakers M System Store, capital \$25,000, incorporated; J. S. Cutchin, Jr., J. H. Cutchin.

N. C., Winston-Salem—Mercantile—Southern Wholesale Corp., capital \$100,000, chartered; Charles Phelps, William Porter, Masten Bldg.

Okla., Oklahoma City—Following sub-contracts awarded for erection plant for Norick Brothers Printing Co., 325 W. Second St.; Heating plant and plumbing, A. F. Binns Plumbing Co., 809 W. Grand St.; Lumber and cement, McGraw, Baughman & Pearley, 20 W. 12th St.; sand and stone, Minkins Lumber Co., 410 N. Western St.; cast stone, Harter Marblecut Stone Co., 1608 W. Main St.; brick, Acme Brick Co., Braniff Bldg.; painting, J. F. Long, 7½ W. Grand St., all Oklahoma City; Harmon & Mattison Construction Co., Contrs., 805 Herskowitz Bldg. 10-27

Okla., Oklahoma City—J. W. Williams Construction Co., Inc., chartered; H. W. Williams, 425½ West Main; J. A. Werme, W. J. Richard.

South Carolina—O. H. Lowther, 70 Muscogee Ave., Atlanta, Ga., acquired 550 acres timber land in Jasper County; advises present development is for production naval stores.

S. C., Charleston—Monogram Coffee Co., capital \$20,000, incorporated; M. V. Haselden, 7 State St.; I. M. Bryan, 9 Gibbs St.

S. C., Eutawville—Tobacco, etc.—Avinger Wholesale Co., incorporated; H. F. Avinger, Mrs. Marcus Avinger.

S. C., Florence—Pee Dee Cigar Co., Inc., chartered; D. W. Stewart, C. L. Boinest.

S. C., Greer—Merchandise—Greer Cash Store, capital \$10,000, incorporated; T. C. Wakefield, Jr., T. C. Wakefield, Sr.

Tenn., Chattanooga—C. W. Howard, 1909 Chamberlain Ave., announces plans for organization of Tennessee-Georgia Creamery Co. to acquire Sequatchie Valley Creamery at Dunlap and also erect modern creamery plant in Chattanooga; new plant to have capacity of about 1,000,000 lbs. butter annually as well as other allied products; plant at Dunlap will be kept open and the gathering station at Bridgeport will be source of supply; company capitalized at \$100,000.

Tenn., Franklin—J. B. Burrus, of Etheridge, reported, plan establishing plant to manufacture automobile pumps; secured option on J. L. Brevard mill house near L. & N. tracks.

Tenn., Harriman—National Golf Co., capital \$25,000, incorporated; J. O. Gibson, Tom Tarwater, L. O. Scott.

Tenn., Memphis—Memphis-Orpheum Co., capital \$25,000, incorporated; B. B. Kahane, J. E. McCadden and Drane Lester, both Bank of Commerce and Trust Bldg.

Tenn., Memphis—Dixon Pickle Corp., capital \$15,000, chartered; Raymond P. Henderson, 1121 Madison St., K. N. Lewis, H. M. S. Dixon, 1656 Irene St.

Tenn., Nashville—Frank Line, representative of Kentucky Oxygen-Hydrogen Co., Logan and Goss Sts., Louisville, reported, plans establishing branch plant to manufacture commercial oxygen to supply requirements of users of oxy-acetylene welding and cutting equipment in Tennessee; capacity of initial unit of proposed plant to be 10,000,000 cu. ft. oxygen per year.

Tenn., Nashville—Operation of barge line on Cumberland River between Nashville and Carthage as first unit of barge system for Mississippi Valley waterways, reported, has been proposed by Standard Unit Navigation Co., 408 Pine St., St. Louis, Mo., Arthur B. Birge, Sec., known as Sunco System.

Tenn., Nashville—Mercantile—Alex Cohen & Son, 212 Public Square, capital \$15,000, incorporated; Alex Cohen, Fred Goldner, I. N. Kornman.

Tenn., Pulaski—C-Y Laboratories, Inc., increased capital, \$350,000 to \$500,000.

Tex., Alta Loma—F. H. Thaman, Homer F. Thaman and associates interested in organizing company to be known as Thaman Fig Assn., reported, plans erecting fig pre-

serving and products plant, to handle about 2,000 lbs. figs daily with ultimate capacity of 20,000 lbs. daily; cost about \$50,000; product to be sold under "Tha-Tex" brand.

Tex., Alvin—Magnolia Fig Products Co., T. C. Edwards, Pres., reported, plans erecting \$100,000 plant, extending present capacity about ten times; modern throughout; employ about 150 persons; manufacture cocoanut and fig mixtures, jellied figs. 8-18

Tex., Amarillo—Capital Hotel Co., Inc., increased capital, \$100,000 to \$300,000.

Tex., Amarillo—Crowe Lime & Cement Co., capital \$30,000, incorporated; E. L. Roberts, 113 Sunset St.; U. N. Oliver, C. T. Crowe.

Tex., Ballinger—W. B. Dunlap, reported, has contract for new co-operative creamery building, approximate cost building \$4000 and equipment \$10,000.

Tex., Beaumont—Riggs Furniture Co., 702 Orleans St., increased capital, \$60,000 to \$150,000.

Tex., Corpus Christi—Southern Bottling Works, James Ferrell, Mgr., Lipan St., reported, acquired 50x140-ft. site on Leopard St., plans erecting new plant, brick, install modern machinery, capacity 48,000 bottles daily.

Tex., Dallas—Ideal Drug Co., capital \$10,000, incorporated; L. F. Randolph, 615 N. Mont Clair; Boyd Brown, Max Phillipson.

Tex., Dallas—Chemical Engineering Corp., capital \$27,500, chartered; W. B. Connell, 3944 McKenney St.; Harry J. Lyons, W. A. Connell.

Tex., Dallas—Texas Hardwood & Supply Co., capital \$50,000, incorporated; E. R. Peterson, John Lundberg, F. D. Field.

Tex., Fort Worth—Overalls, etc.—Williamson & Dickie, 509 Rio Grande Ave., let contract to C. M. Davis, Joseph Bldg., for plant addition; 75x110 ft., reinforced concrete, composition roof, concrete floor, cost about \$15,000. 11-3

Tex., Houston—Magnolia Coffee Co., 2001 N. San Jacinto St., reported, let contract to W. E. Woodruff, Larendon Bldg., for erection plant addition; Joseph Finger, Archt., Keystone Bldg. 10-13

Tex., Houston—Galvanizing and Plating Co. of Texas, capital \$50,000, incorporated; C. A. Mattis, R. M. Carney, 716 Rosalie St., Robert L. Sonfield, Natl. Bank Bldg.

Tex., Houston—Safety Construction Co., capital \$10,000, incorporated; Carter W. Wesley, C. F. Richardson, 1509 Robin St.; W. J. Howard.

Tex., Houston—Rouse Drug Co., capital \$40,000; Robert D. Rouse, 1621 Maver St.; Sam Rouse, Louise Rouse.

Tex., Laredo—Reliable Tool Co., incorporated; A. C. Savay, John S. Morris, D. Trevino.

Tex., Lufkin—Spivy-Crow Drug Co., capital \$30,000, incorporated; R. L. Spivy, R. D. Crow, Mrs. C. Spivy.

Tex., Marshall—Texas Natural Resources Corp., J. C. McKnight, Sec., 1182 Broadway, N. Y., reported, plans erecting plant, reducing to by-products lignite coal; has purchased 7000 acres in Panola County, of which 4000 acres have been tested for lignite and found satisfactory. Bryan Blalock, Sec., Chamber of Commerce, wires: "7000 acres lignite land is to be developed by Texas Natural Resource Corp. of New York City; Charles Tisch, director Lafayette National Bank of Brooklyn, 69 Lafayette Ave., Brooklyn, N. Y.; John A. Klenle, V-P. Mathieson Alkali Works, 250 Park Ave.; Edward A. Green, Pres. Citizens Title Insurance Mortgage Co., New York; Harry W. Barley, Pres. F. R. Cruikshank Co., 1 Liberty St., New York, and John Calvin McKnight, New York City, are some of the Directors."

Tex., McAllen—Hicks Rubber Co. of McAllen, incorporated; D. T. Hicks, D. N. Hicks, E. A. Hicks.

Tex., San Antonio—Peacock Military Academy, capital \$40,000, chartered; Wesley Peacock, Jr., 2811 W. Ashby St.; Donald Wing Peacock, T. H. Ridgeway.

Tex., San Antonio—Action-Display Advertising Co., Inc., increased capital, \$20,000 to \$35,000; changed name to Outdoor Advertising Co., 806 E. Houston St.

Tex., San Antonio—Overalls—A. Fine-silver, 132 S. Flores St., reported, let contract to Rogers & Crosby, 2123 Arbor Pl., for erection 1-story factory, Cameron St., reinforced concrete, store, tile and stucco; Harvey P. Smith, Archt., Natl. Bank of Commerce Bldg. 9-15

Tex., Sherman—Sherman Bread Co., reported, plans erecting new building on S. Chockett St.; 1 story, 45x75 ft., brick, tar and gravel roof, 5x30 ft. skylight; install \$25,000 modern baking machinery; John Tulloch, Archt.

Tex., Waco—D. D. Moore, reported, acquired the Waco Times Herald, will publish.

Tex., Waxahachie—Oldham Hardware Co. increased capital, \$7500 to \$15,000.

Va., Hopewell—Peoples Baking Co., Inc., capital \$10,000, chartered; R. L. Cotton, Richmond; E. A. Vivas, Hopewell; manufacture bread, cakes, etc.

Va., Lynchburg—American Ornamental Bottle Corp., capital \$100,000, chartered; E. H. Hancock, Woodlawn Ave.; Fred Harper, Geo. N. Mas; manufacture bottles, containers, etc.

Va., Lynchburg—A. C. Barrow & Co., Inc., 93 Worth St., New York City, capital \$500,000, chartered; W. H. Green, Pres., New York City; T. G. Hobbs, J. Bolling Jones, Jr., Lynchburg; manufacture suspenders, overalls, etc.

Va., Ocean View—Amusement Park—Fred W. Pearce & Co., 237 E. Jefferson St., Detroit, Mich.; John A. Miller Co., Inc.; R. S. Uzzell Corp.; Philadelphia Toboggan Co., 130 E. Duval St., Philadelphia, Pa., furnishing equipment for amusement park, Otto Wells, Gen. Mgr., Wells Amusement Co., Inc., Box 868, Norfolk, Va. 9-1

Va., Port Richmond—Alpha Shoe Co., Inc., capital \$25,000, chartered; Theodore D. Oster, Geo. H. Bloom, Philip F. Hoffman.

Va., Richmond—Advertising, etc.—P. W. Leonard, Inc., capital \$25,000, chartered; P. W. Leonard, L. M. Mathieu, Jane M. Leonard.

Va., Richmond—Canal Cafe, Inc., capital \$10,000, chartered; W. B. Ross, 1614 Grove Ave.; Chas. Moriconi, both Richmond; Charles M. Bridges, Ashland, Va.

W. Va., Clarksburg—South Penn Oil Co., Wolf Summert, W. Va., reported, plan building filling station on W. Pike St., cost including equipment about \$75,000.

W. Va., Salem—Harrison Glass Co., capital \$25,000; Wm. D. Stone, V. J. Kuntz, W. H. Tomlinson; recently purchased Alley Glass Co.

W. Va., Huntington—Torrice Cleaners and Dyers, Inc., 609 Fourth Ave., capital \$20,000, chartered; Geo. F. Schulze, Fred Torrice, 302 Fourth Ave.; Edna M. Schulze.

W. Va., Wellsburg—International Paper Co., Pershing Square Bldg., Park Ave. and 42nd St., New York City, advises have acquired through medium of International Securities Co. entire capital stock of George & Sherrard Paper Co. of Wellsburg; this company manufactures jute paper and converts into flour sacks; also makes cement and fertilizer multi-wall bags from kraft paper under patents licensed to it by Bates Valve Bag Corp.; present equipment with slight changes will produce about 20,000 multi-wall bags annually and plans to gradually increase production; business will be carried on in name of George & Sherrard Paper Co. as formerly; buy under direction of International Paper Co. management. 10-27

Motor Bus Lines and Terminals

Ala., Hawthorne—E. B. Bird, Box 35, will operate bus line between Hawthorne and Mobile; has one bus in use.

Ala., Luverne—C. T. Butler applied for permit to operate motorbus line between Luverne and Brewton via Brantley and Andalusia.

Ala., Opp—R. D. Johnson applied for permit to operate motorbus line between Opp and Elba.

Ky., Paducah—Egyptian Transportation Co., Marion, Ill., reported, establish bus service between Paducah and Danville, Ill.

Miss., Columbia—Gay's Taxi-Bus Line Co., 329 Pearl St., operated bus line to Hattiesburg via Sumrail, Clyde; have 10 buses in use and contemplates purchasing Buick 16-passenger parlor coach and probably others. 10-13

Tex., Austin—Southland Transportation Co., Guy Shields, Mgr., reported, absorbed Parker Motor Lines, operating lines to Waco; sale under approval of Railroad Comm.

Va., Martinsville—Camel City Coach Co. of Va., incorporated; John J. Gilmer, C. T. Leinbach, W. G. Tennille, 619 Summitt St., all Winston-Salem, N. C.

Motor Cars, Garages, Filling Stations

Fla., Lakeland—Gable Auto Electric Co., Inc., chartered; Glen Gable, Sidney G. Brown.

Fla., Palm Beach—City Comm., reported, plans building new shed addition to municipal garage; dimensions have been changed from 350x40 ft. to 364x40 ft.; receive bids about Nov. 16; A. E. Parker, City Mgr.

Fla., Stuart—St. Lucie Motors, Inc., chartered; Earl J. Ricou, F. D. Ricou.

Ga., Atlanta—F. W. Patterson, N. Forsyth St., will erect 2-story, 17x125-ft. garage in rear of 1030 to 1040 Spring St. N. E., rein-

forced concrete, tar and gravel roof, cost \$10,000; day ork.

Ky., Monticello—Monticello Gasoline Co. incorporated; P. K. Daugherty, E. B. Rice, Mary L. Carter.

Md., Baltimore—S. and R. Motor Co., Inc., capital \$75,000, chartered; W. Thomas Rurark, Eleventh and Eastern Ave., John C. Simmons, Claybrook B. Sibley.

Md., Baltimore—Lord Baltimore Filling Station, American Bldg., reported, has permit for two 1-story brick buildings, cor. Mt. Royal and St. Paul St., one 14x32-ft. and one 100x24-ft., stove heat; cost \$10,000; construction by owner.

Md., Bladensburg—Investment Motor, Inc., chartered; Robert C. Jones, Loring C. Miller, Tracy K. Bruce.

Md., Riverdale—Hyattsville Hills and Washington Motor Service, Inc., 816 Boulevard, capital \$50,000, chartered; John T. Hopkins, Atway B. Zantlinger, Aloysius R. Bowers.

Miss., Jackson—See Miscellaneous Enterprises.

Mo., Raytown—Raytown Motor Co., capital \$20,000, incorporated; James Hendrix, A. E. Keeney, H. G. Leedy.

Mo., Independence—Carvey Chevrolet Co., capital \$25,000, chartered; Thomas E. Garvey, J. P. Whitaker, Jno. C. Friel, all Kansas City.

Mo., Kansas City—Automobile Accessories—Safety Brake Service Corp., 1812 Baltimore St., chartered; Barney D. Lakin, 3001 Forest Ave., Victor Van Hee; Joseph Monohan, Savoy Hotel.

Mo., Kansas City—Morley Brothers, 722 Dwight Bldg., reported, have permit for \$11,000 garage, 115 W. Thirteenth St.

Mo., Kansas City—Automobile Accessories—Reo-Shofstall, Inc., capital \$25,000, chartered; C. E. Shofstall, 4935 State Line Rd.; R. B. Shofstall, 609 W. 59th St. Terrace; E. F. Boswell, 39th and Summitt Sts.

Mo., St. Louis—Brahm & Mitchell Motor Co., E. A. Brahm, Pres., 1049 S. Boyle Ave., reported, erect garage and salesroom at Kingshighway and Pernod St., 2 story, 83x110 ft., brick and reinforced concrete, fireproof; cost about \$70,000; John Wonderlich, Archt., 4241 Juniata St.

N. C., Charlotte—Dunn Moneyhun Co., capital \$100,000, incorporated; C. M. Dunn, 16 Kenwood Ave.; Lawrence E. Moneyhun, J. V. Word.

Okla., Perry—E. D. Thomas, of Paden acquired site cor. Sixth and G St., erect filling station.

S. C., Charleston—Charleston Auto Sales Co., incorporated; J. R. Pinero, W. C. Follin, C. W. McDermott.

Tenn., Knoxville—Hunter Bros. Motor Co., N. Broadway near Chicago Ave., let contract to Lynn Hayes, Dooler-Gillespie Bldg., for erection garage; reinforced concrete with steel, stucco walls, replacing burned structure.

Tex., Alice—Bennett & Nayer plan building sales room and garage on E. Main St.; Hardy & Curran, Archts., Nixon Bldg., Corpus Christi.

Tex., Angleton—Angleton Motor Car Co., Inc., capital \$10,000, chartered; Geo. A. Breman, Mrs. Geo. A. Rheman, Mrs. T. J. Gibson.

Tex., Cotulla—Cotulla Motor Co., capital \$15,000, incorporated; Giles Hawley, John Yantis, R. S. Yantis.

Tex., Houston—R. E. Houser, 817 Dallas St., reported, leased 100x100-ft. site cor. Main and Drew Sts.; erect 1-story and basement auto laundry and lubricatorium, 32x76 ft., brick and hollow tile; J. W. Northrop, Jr., Archt., West Bldg.

Tex., Laredo—J. Edwards, Contr., reported, erect \$15,000 garage at Sta Maria and Lincoln St.; materials furnished by Alamo Lumber Co.

Tex., Pampa—Underwood Motor Co., capital \$21,000, incorporated; T. K. Underwood, C. H. Rutter, Walter Cheek.

Tex., San Antonio—Jack Neal Nash Motor Co., Augusta St., has permit for 60x125-ft. building, 318 S. Laredo St., concrete and brick, cost about \$20,000.

Tex., San Antonio—F. C. Davis, Brady Bldg., reported, erect battery station, 115 San Pedro Ave.; brick and concrete, cost about \$17,750; W. N. Hagy, Contr., 312 Navarro St.

Tex., Waco—The Texas Co., Fifteenth and Morrow Ave., will erect automobile service station, brick walls, white stucco, concrete floor, Texaco slate surface shingle roof, 1-story, 22x22-ft.; no general contract; Braselton Lumber Co., lumber; plumbing and electric work by Geisler Plumbing Co. and

Geisler Electric Co., both 114 S. Eighth St.; J. E. Elliott, 3406 Mt. Vernon Ave., Archt., Houston.

Railways

N. C., Asheville—Valley River Southern Railway Co. of Asheville, capital \$100,000, incorporated; Kester Walton, Medical Bldg., Geo. F. Robinson, Medical Bldg., Randon P. Hodges; build and operate railroad.

West Virginia—West Virginia Midland Ry. Co., H. B. Curtin, Pres., Clarksburg, reported, has been authorized by Division 4 of the Interstate Commerce Commn. in Finance Docket No. 6543 to issue \$275,000 capital stock to be sold at par for cash.

Railway Shops and Terminals

Ga., Macon—Southern Railway System, H. W. Miller, V.-P., 1300 Pennsylvania Ave., Washington, D. C., reported, let contract to Dwight P. Robinson & Co., 125 E. 46th St., New York, for 24-engine roundhouse and modern coaling system, power plant, boiler house, water tank and office building; estimated cost \$400,000.

Miss., Meridian—Meridian & Bigbee River Railway Co., G. M. Neville, Pres., advises have acquired 10 acre site for right of way and terminal facilities in corporate limits of Meridian; will erect passenger depot, freight depot, automobile unloading sheds, icing facilities and yard and track facilities; cost about \$100,000.

Va., Sycamore—Norfolk & Western Ry. Co., W. P. Wiltsee, Ch. Engr., Roanoke, Va., reported, will expend about \$1,000,000 for construction two new car repair yards replacing temporary quarters in east end of Williamson, W. Va. yard; one of new yards to be located at Sycamore at upper end of present yard and one at Lick Creek. W. P. Wiltsee, Ch. Engr., Roanoke, Va., advises: "We are just asking for bids on new yard and changes and relocation of our present main track just north of Winston-Salem, N. C. No contracts have been awarded at this date, but bids are due at this office Nov. 10."

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Alabama—See Bridges, Culverts, Viaducts.

Ala., Birmingham—Jefferson County Board of Revenue receives bids Nov. 22 for 9 roads: 2½ mi. Thirty-fifth Ave. north, city limits to Boyles, 23,000 sq. yd. concrete; 5 mi. Hueytown Loop road, Bessemer to Hueytown Lane, 54,000 sq. yd. black base, Warrenite bitulithic top; 6¼ mi. Mt. Pinson road, from end of present paving to Mt. Pinson, 66,000 sq. yd. black base, Warrenite bitulithic top; 1 mi. Green Springs road, from city limits of Birmingham to Edgewood, 10,000 sq. yd. penetration; ¾ mi. Snyder road, Montgomery Highway northeast, 7,000 sq. yd. penetration; ½ mi. Huffman-Saddler's Gap road, from Huffman east, 5,500 sq. yd. penetration; ½ mi. Huffman-Ketona road west, 5,500 sq. yd. penetration; ¾ mi. Powderly-Wenonah road, from Powderly south, 7,500 sq. yd. penetration; 15 mi. Bankhead Highway, from end of present paving near Adamsville to county line, 159,000 sq. yd. Finley method penetration; plans on file and from C. J. Rogers, County Highway Engr.

Ala., Mobile—City, Harry T. Hartwell, Mayor, has tentative plans for paving 75 streets, including Virginia St., group of streets north of Springhill Ave., east of Lafayette St., and south of Davis Ave., etc.; estimated approximate cost \$2,000,000; Wright Smith, City Engr.

Ark., Arkadelphia—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, receives bids Nov. 16 to pave Bankhead Highway No. 7, through Clark and Hot Springs Counties; O. L. Hemphill, State Highway Engr.

Ark., Fayetteville—City plans grading and graveling old Huntsville road from end of new pavement to city limits. Address City Clk.

Ark., Hot Springs—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, receives bids Dec. 16 to pave Bankhead Highway through Garland County to connect with paving in Hot Spring County; O. L. Hemphill, State Highway Engr.

Ark., Russellville—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock,

receives bids Nov. 15 for 6 mi. grading and drainage structures, Atkins-Hector road, State Highway No. 105, Sec. 1, 53,179 cu. yd. excavation, 71,902 lb. reinforcing steel; plans on file; O. L. Hemphill, State Highway Engr.

Fla., Crawfordville—Wakulla County Commrs. plan road building, cost \$150,000. See Financial News—Bond Issues Proposed.

Fla., Fort Lauderdale—City, Glenn E. Turner, Clk., plans expending about \$84,500, for sidewalk paving in Improvement Districts No. 58, 41, and in D.sts. No. 108, 111, 114, to include curbs, lights.

Fla., Jacksonville—City Comm. plans widening Main St., Twelfth to Long Branch; will sell bonds.

Fla., Miami—City, Ernest Cotton, Director of Public Works, plans paving streets around \$1,000,000 high school; S. W. Third and S. W. First, between Twenty-fourth and Twenty-fifth Ave.; Twenty-fourth and Twenty-fifth Ave., between First and Third; Dade County School Board will lay sidewalks.

Fla., Orange Park—Bond trustees of Orange Park receive bids Nov. 14 for 2½ mi. streets; plans from Joseph G. King, Clk., or Robert N. Angus, Civil Engr., 317 Forsyth St., Jacksonville.

Fla., Pensacola—Escambia County, L. W. Hardy, County Commr., will appropriate \$40,000 toward 8 mi. Ferry Pass road, sand-clay, oil and slag treated.

Fla., Tampa—City Comm., W. Lesley Brown, City Mgr., receives bids Nov. 15 for 4176 sq. yd. 2½-in. asphalt block or 2½-in. vitrified brick pavement on shell or limerock base, 1½-in. natural rock asphalt on 5-in. cement concrete base, with 1-2½-5 mix; 6-in. reinforced cement concrete with 1-2-3 mix, asphaltic expansion joints; 2-in. asphaltic concrete on 5-in. cement concrete base, with 1-2½-5 mix; 3143 lin. ft. 4x18-in. granite curb, 7x16-in. concrete curb, 1-2-4 mix, integral curb, used with cement concrete pavement only, 1-2-3 mix; 1824 cu. yd. grading; plans from Engineering Dept., Bureau of Streets.

Fla., Pensacola—City Comm. plans paving about 42 streets. See Financial News—Bond Issues Proposed.

Fla., West Palm Beach—Palm Beach County Commrs., Fred E. Fenno, Clk., receive bids Nov. 16 for 2 roads and 4 bridges: 5¼ mi. Chosen-Torry Island road, from Chosen to north end of Torry Island, 130,000 cu. yd. muck excavation, 33,000 cu. yd. rock excavation, 3 timber bridges; 4¼ mi. Chosen-Pelican road, from Chosen to intersection with Belle Grade-Pahokee road, 56,000 cu. yd. muck excavation, 26,000 cu. yd. rock excavation; 15-ft. timber bridge; plans from Jake Boyd, County Engr.

Fla., West Palm Beach—City, A. E. Parker, Mgr., plans improving Dixie Highway.

Ga., Atlanta—Fulton County Commrs. plan widening and concrete paving Piedmont Ave. from Southern Ry. belt line to Tenth St.; Edwin F. Johnson, Commr.

Ga., Brunswick—City, C. M. Peddicord, Mayor, plans street paving, cost \$75,000. See Financial News—Bond Issues Proposed.

Ga., Dawson—City, R. R. Jones, Clk., receives bids Nov. 29 for 35,000 sq. yds. street paving, with drainage, curb and gutter, etc.; plans on file and from H. S. Jaudon Engineering Co., Elberton.

Ga., Folkston—Charlton County considering building Folkston-Nahunta Highway. Address County Commrs.

Ga., Fort Gaines—Clay County Chamber of Commerce considering street paving in Fort Gaines.

Kentucky—State Highway Comm., Frankfort, received low bid for 2 roads: Lee County—2.5 mi. grade and drain Beattyville-Jackson road, from 1 mi. west of Tallega to Breathitt County line, Monahan & Turner, Lexington, \$54,038; Shelby County—3.1 mi. surfacing, Shelbyville-Cropper road, from Clear Creek northeast to Shelbyville, Carl L. Lewis, Covington, \$51,619, waterbound macadam; \$57,626, bituminous macadam. 9-29

Ky., Catlettsburg—State Highway Comm., Frankfort, receives bids Dec. 22 for Hoods Creek-Big Sandy road, Boyd County; E. N. Todd, State Highway Engr.

Ky., Covington—Kenton County plans road building. Address County Commrs. See Financial News—Bond Issues Proposed.

Ky., Glasgow—State Highway Comm., Frankfort, receives bids Nov. 22 for 6 mi. grading and draining, Burkesville-Glasgow road, Barren County; E. N. Todd, State Highway Engr.

Ky., Louisville—Gould Contracting Co., Independent Bldg., Nashville, Tenn., low bidder at \$91,957 for grade elimination work at Fourth and G Sts.

Ky., Owensboro—Davies County plans

building cross-county roads, including 12 mi. bank gravel Lyddane Bridge road, from Henderson road to Windy Hollow section; 3 mi. road from Leitchfield road, northward, to connect Leitchfield road with Hardinsburg road; extend Utica road from Grave Yard hill to McLean County line.

La., Bastrop—City receives bids Nov. 10 for about 3,000 ft. paving; plans from A. C. Volk, City Engr.

La., Delhi—State Highway Comm., Frank T. Payne, Chmn., Baton Rouge, and City of Delhi, C. E. Wiggins, Mayor, plan widening to 20 ft. and to 40 ft. in business dist. 1 mi. Dixie Highway through city; Nicholls W. Bowden, State Highway Engr.; Chas. D. Evans, City Engr. 11-3

La., Natchitoches—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Nov. 29 to furnish gravel and build 2 sections roads in Natchitoches Parish: Sec. F, 9.498 mi. from gravel road south of south end of Cloutierville Bridge over Cane River through Cloutierville to Monette Bridge; Sec. G, 1.85 mi., from Derry to gravel road south of south end of Cloutierville Bridge; plans on file; Nicholls W. Bowden, State Highway Engr.

La., Oakdale—City plans boulevard system of paving on Sixth Ave. and Tenth St.; white way, drainage and graveling other thoroughfares; \$80,000 available; Henry A. Mentz, Const. Engr., Hammond. 11-3

Md., Baltimore—Board of Estimates approved plans for sheet asphalt paving on Dolfield Ave., Sequoia to Kate Ave.; estimated cost \$60,400; Nathan L. Smith, Highways Engr.; Wm. F. Broening, Mayor.

Md., Baltimore—Board of Awards receives bids Nov. 16 to grade, curb and pave with 12,700 sq. yd. sheet asphalt on concrete base, streets in Cont. No. 440; plans on file; Nathan L. Smith, Highway Engr.; C. F. Goob, Ch. Engr.; Wm. F. Broening, Mayor.

Md., Ocean City—City, W. W. McCabe, Mayor, plans widening east side of Baltimore Ave. 8 ft., between Third and Ninth Sts.

Md., Rockville—Montgomery County Commrs. plan 1½ mi. road in Laytonsville Dist., from Damascus-Etchison road, toward Patuxent River.

Md., Salisbury—Wicomico County Commrs. plan improving 2 roads: Gravel 12 mi. Allen-Allen Wharf road, Trappe Dist.; grade and lay off ¼ mi. road, from Meadow Bridge Stone road to county road leading from Fruitland to St. Luke's Church.

Miss., Ackerman—City considering paving certain streets in center of city, including Chester and Main. Address The Mayor.

Miss., Ashland—Benton County considering extending Blue Mountain west road across Benton to Benton County north and south highway; clay and sand pavement. Address County Board of Suprvs.

Miss., Belzoni—Humphreys County Board of Suprvs. plans concrete road from Belzoni to Silver City; A. R. Hutchens, Clk.

Miss., Brookhaven—City, Perry A. Coker, Clk., plans expending \$100,000 to pave 4 streets.

Miss., Canton—Madison County Commrs. plan building 9 roads: Concrete highway from Canton to Hinds County line, connecting with concrete highway from Jackson; concrete road from Flora to Hinds County line; improve Canton-Flora road; improve Canton-Moore's Ferry road; gravel road from Canton to Camden via Sheron; improve gravel road from Camden to Canton-Pickens Highway; gravel road from Shoccoe to Pearl River Consolidated School; gravel asphalt 2 mi. Canton-Turnette road, from Canton east; gravel Vinson road; cost \$600,000. See Financial News—Bond Issues Proposed. 10-27

Miss., Forest—See Sewer Construction.

Miss., Hazlehurst—Copiah County Board of Suprvs. receives bids soon to maintain gravel roads in 5 Beats, and for dirt roads in 5 districts, totalling about 1,000 miles. 9-29

Miss., Laurel—Jones County Board of Suprvs. plans graveling 9.7 mi. Laurel-Bay Springs road, building bridges on road and improving bridges on Reddoch-Ferry road, in Beat 2; cost \$75,000. See Financial News—Bond Issues Proposed. 10-20

Miss., Meridian—City, W. H. Owen, Mayor, plans grading, curbing, guttering, street and sidewalk paving and sewerage extension.

Mo., Joplin—City receives bids Nov. 15 for one course concrete sidewalks on Murphy Ave., from Twenty-fourth to Twenty-sixth and from Twenty-sixth to Twenty-second St.; S. P. Ashcraft, City Engr.

Mo., Kansas City—City, Matthew S. Murray, Director of Public Works, plans widening Fifteenth St., Campbell St. to Baltimore Ave.

Mo., Kansas City—City, Matthew S. Mur-

ray, Director of Public Works, plans widening Oak St. 26 to 46 ft., from Forty-seventh to Fifty-second.

Mo., Ozark—State Highway Dept., Jefferson City, plans expending \$60,000 to re-route and improve Federal Highway No. 55 through Christian County; T. H. Cutler, State Highway Engr.

Mo., Springfield—Greene County Highway Comm., A. J. Eisenmayer, Chmn., plans county's portion of Sac River Valley Highway, linking Springfield and Stockton, through Walnut Grove.

N. C., Hendersonville—Druid Hills Dist. Comm., plans street improvement. See Financial News—Bond Issues Proposed.

N. C., High Point—State Highway Comm., Raleigh, receives bids in Dec. to hard surface 3 mi. Route 70, from High Point to Virginia State line; J. Elwood Cox, State Highway Commr. of Fifth Dist.; Lester Ames, Ch. Highway Engr.

Okla., Blackwell—City Commrs. receive bids Nov. 15 for 20 blocks paving, including 9 blocks in Ikard Terrace; brick and concrete.

Okla., Enid—City, F. E. Buckminster, Clk., receives bids Nov. 11 to pave with 6-in. Armocrete South Hayes St., in Improvement Dist. No. 158.

Okla., Tecumseh—Pottawatomie County Commrs., A. W. Goar, Chmn., receives bids Nov. 15 for 17 mi. gravel road.

S. C., Anderson—State Highway Dept., Ben M. Sawyer, Ch. Highway Commr., Columbia, plans expending \$875,000 to pave 3 roads, totalling 29 mi. in Anderson County: 9 mi. between Abbeville County line and Belton; 6 mi. from Belton to end of present hard surfaced road near Anderson; 14 mi. road from end of hard surface road near Anderson to Oconee County line, near Clemson College.

Tenn., Charlotte—Dickson County and State Highway Dept., Nashville, plan improving State Road No. 48, Dickson to Wards, Montgomery County line; State Highway Maintenance forces will probably do work.

Tenn., Chattanooga—City, R. H. Crox, Commr. Dept. of Streets and Sewers, plans widening Cherry St. between Seventh and Second and Second St. from Walnut to Broad.

Tenn., Knoxville—Dept. of Highways and Public Works, C. N. Bass, Ch. Highway Engr., Nashville, will let contract Dec. 15 to grade road from Three Points to Grainger County line.

Tenn., Memphis—Shelby County, Luther Jones, County Road Commr., plans expending about \$100,000 to improve county roads.

Tenn., Memphis—Shelby County plans resurfacing Pigeon Roost and Horn Lake roads; will let bids for paving, soon after Jan. 1; may build bridge over Nonconah Creek, on Pigeon-Roost road. Address County Commrs.

Tenn., Nashville—Davidson County Highway Comm., F. M. Dorris, Chmn., plans belt line system of highways around Nashville.

Tenn., Pulaski—Giles County and State Highway Dept., Nashville, has available \$50,000 to improve State road between Pulaski and Minor Hill.

Texas—State Highway Comm., R. S. Sterling, Chmn., Austin, receives bids Nov. 14 for 4 roads: Shelby County—941 mi. grading and drainage structures, State Highway No. 35, from Tanaha southwest, 10,177 cu. yd. excavation and borrow, 6875 lb. reinforcing steel; Grimes County—3,315 mi. grading and drainage structures, State Highway No. 90, from Navasota to Navasota River, 35,329 cu. yd. excavation and borrow, 14,515 lb. reinforcing steel; Real County—18,195 mi. 3-in. caliche surface course on 6-in. sledged stone base course, Highway No. 41, from Edwards County line to Kerr County line, 16,935 cu. yd. sledged stone base course, 24,297 cu. yd. caliche surface course; Polk County—2,107 mi. grading and drainage structures, Highway No. 106, from Trinity County line to Carmona, 19,499 cu. yd. excavation, 3917 lb. reinforcing steel; plans on file and from Div. Engr.; R. A. Thompson, State Highway Engr. 11-3

Tex., Alvin—City plans paving downtown streets, cost \$100,000. Address City Clk. See Financial News—Bond Issues Proposed.

Tex., Anderson—Grimes County, Ralph W. Barry, Judge, plans 344 mi. grading, gravel surface with bituminous top, Highway No. 6 at southern edge of Navasota across S. P. Ry., G. C. & S. F. Ry. and Missouri Pacific Ry. tracks, estimated cost \$92,000; will construct overpass later; Oscar A. Seward, Jr., Engr., Navasota.

Tex., Batesville—Zavalla County, N. H. Hunt, Judge, plans 31.2 mi. grading and bridges, Highway No. 55, Uvalde-La Pryor-Carrizo Springs road, from Uvalde County

line to Dimmitt County line, estimated cost \$90,600; receives bids soon; G. M. Jowers, Crystal City, and 546 Kayton Ave., San Antonio.

Tex., Bay City—Matagorda County, Arthur Harris, Judge, considering building 100 mi. highways; E. N. Gustafson, County Engr.

Tex., Beaumont—City, Ollie J. Bloyd, Mgr., plans widening Pearl St. to 60-ft.

Tex., Beaumont—City, Ollie J. Bloyd, Mgr., plans widening Pearl St. to 60-ft.

Tex., Beeville—City Comm., Mrs. M. M. Marsh, Clk., considering 5 additional paving projects.

Tex., Brackettville—Kinney County, John H. Stadler, Judge, plans 18,711 mi. grading and bridges, Highway No. 3, from Brackettville to Val Verde County line, estimated cost \$128,300; also 8 bridges over 20-ft. span, estimated cost \$61,600; W. F. Hutson, Engr.

Tex., Corpus Christi—Nueces County Commrs. Court plan expending \$2,000,000 for road improvement.

Tex., Corpus Christi—City, J. W. Smith, Street and Park Commr., plans widening Chaparral St. from center of business section to terminus of north side of city.

Tex., Corsicana—Navarro County, Warren Hicks, Judge, plans road building in Road Dist. No. 12; cost \$30,000. See Financial News—Bond Issues Proposed.

Tex., Cotulla—State Highway Comm., R. S. Sterling, Chmn., Austin, plans 90 mi. north and south and east and west road, known as Highway No. 53, through La Salle County to Artesia Wells, from Carrizo Springs via Atherton and Catarina; from Artesia Wells State Highway No. 53 will pass over No. 2 to Cotulla and extend east through Los Angeles and Fowler to McMullen County line; R. A. Thompson, State Highway Engr.; G. A. Bracher, State Engr. of Washington County, supervise construction.

Tex., Cuero—State Highway Comm., R. S. Sterling, Chmn., Austin, plans receiving bids for State Highway No. 72, between Yorktown, Nordheim and Karnes-LeWitt County line; S. H. Gullledge, Engr. for Districts 7 and 8; R. A. Thompson, State Highway Engr.

Tex., Del Rio—Val Verde County, W. F. Littleton, Judge, plans surfacing highways, cost \$250,000. See Financial News—Bond Issues Proposed.

Tex., Edinburg—Hidalgo County, Mission Dist., plans improving 6 roads totalling 55 mi.: Sharry Road, from river to Edinburg Dist. line; Main Blvd., north and south; Goodwin Road; 3 bridges over roads from McAllen line on east to Edinburg line; 2 bridges over floodway south of Mission. Address Commrs. Court. See Financial News—Bond Issues Proposed.

Tex., Edna—Jackson County Commrs. plan road building in Road Dist. No. 3, cost \$80,000. See Financial News—Bond Issues Proposed. 10-20

Tex., Fort Worth—City, O. E. Carr, Mgr., and Tarrant County, Damon Davis, Engr., considering opening and grading 1 mi. Thirty-third St. in North Fort Worth, connecting Rosen Heights and Postepco Heights.

Tex., Galveston—City, E. H. Ivey, Commr. of Streets, receives bids soon to pave Twenty-sixth St., Broadway to Ave. N.

Tex., Graham—Young County, W. F. Parsley, County Judge, Olney, plans 12,164 mi. grading and bridges, Highway No. 24, from Newcastle to Olney; Guy R. Johnston, Engr.

Tex., Hempstead—Waller County plans hard surfacing 5 roads, including Highways No. 6, 20, 73 and 73-A, and sections of route extending from Houston to Fayette County; cost \$1,500,000. Address County Commrs. See Financial News—Bond Issues Proposed.

Tex., Houston—Harris County Commrs. Court, Norman Atkinson, Judge, receives bids soon for 1½ mi. macadam with bituminous top paving on Lawndale Ave., from Lawndale Avenue Bridge to Broadway Blvd., Harrisburg; estimated cost \$25,000.

Tex., Houston—City, George Woods, Mgr., plans receiving bids to pave 1 mi. Canal St., from Houston Belt and Terminal tracks to Seventy-fifth St.; may pave Scott St., Polk to Pierce; J. C. McVea, City Engr.

Tex., Houston—Harris County, Norman Atkinson, Judge, plans Washington County road from Cypress to Waller County line.

Tex., Houston—Harris County, Norman Atkinson, Judge, plans road improvement, including paving Old Spanish Trail, west; Washington County Highway; Goose Creek road; will sell bonds; H. L. Washburn, County Auditor.

Tex., Kaufman—Kaufman County, Chas. Ashworth, County Judge, plans paving Highway No. 40, Fordney Precinct, cost \$40,000.

See Financial News—Bond Issues Proposed. 9-29

Tex., Liberty—Liberty County, C. R. Wilson, County Judge, plans road building. See Financial News—Bond Issues Proposed.

Tex., Lubbock—City Comm. plans 13 blocks street paving in residence district.

Tex., Memphis—Hall County, A. C. Hoffman, County Judge, plans road building in Turkey Road Dist., cost \$25,000. See Financial News—Bond Issues Proposed.

Tex., San Antonio—City received low bid from Uvalde Rock Asphalt Co., Frost Natl. Bank Bldg., San Antonio, at \$6501 to pave and curb Rivas St., from N. Laredo to San Marcos St.; I. Ewig, City Engr. 10-27

Tex., San Antonio—City Comm., Paul E. Steffler, Commr. of Streets, plans widening Martinez St. to 50-ft. between Garden St. and Dwyer Ave.; South Alamo St., between East Commerce and East Nueva St.; later between Nueva and Martinez or Refugio St.

Tex., Teague—City plans $\frac{3}{4}$ mi. 2 course crushed rock and asphalt paving on Main St., in business section; later plans paving in residential section. Address City Clk.

Tex., Tilden—McMullen County, L. A. Martin, Judge, plans road building, cost \$185,000. See Financial News—Bond Issues Proposed.

Tex., Waco—City plans widening Seventh St., Baylor to Speight. Address City Clk.

Tex., Wheeler—Wheeler County Commrs. Court plans paving 3 first-class roads, totaling 68 mi., and improving 100 mi. lateral or second-class roads: 30 mi. Highway No. 66 across county, from Oklahoma line to Gray County; Highway No. 4, north and south across county; Highway No. 33, to connect with Gray County road toward Pampa, \$680,000; improvement lateral roads, \$200,000. See Financial News—Bond Issues Proposed. 11-3

Tex., Yoakum—City Comm. plans about 80 block street paving, cost \$170,000.

Va., Chuckatuck—See Bridges, Culverts, Viaducts.

Va., Roanoke—City, W. P. Hunter, Mgr., plans widening Campbell Ave., Fourth to Seventh, estimated cost \$46,900.

W. Va., Charleston—State Road Comm., E. B. Carskadon, Sec., plans improving 19 $\frac{1}{2}$ mi. dirt road, from Amy, Lincoln County, to Ruth, Kanawha County, being part of Charleston-Hamlin route, connect county seats of Lincoln and Kanawha Counties.

W. Va., Fairmont—State Road Comm., E. B. Carskadon, Sec., Charleston, receives bids Nov. 29 for 1.5 mi. grading and draining Route 73, from end of paving to Monongalia County line; plans on file or from W. S. Downs, Div. Engr., Morgantown.

Contracts Awarded

Arkansas—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, let contracts for 9 roads and 5 bridges, estimated cost \$750,000: Randolph County—8 mi. grading and draining Corning-Pocahontas road, Davis Construction Co., Booneville, Mo., \$83,220; Lawrence County—2 mi. gravel surface, Lauratown-South road, Gibson & Robbins, Hoxie, Ark., \$14,091; Randolph County—8 mi. concrete Pocahontas-Corning road, W. J. Runyon Paving Co., Sheffield, Ala., \$202,645; St. Francis County—timber bridge on Widener-Chaffield road, United Construction Co., Cincinnati, Ohio, \$8,327; Nevada County—12 mi. grading and draining, Prescott-Bluff City road, S. B. Boyd, Columbia, Miss., \$52,754; Pike County—7 mi. grading and drainage, Kirby-Murfreesboro road, Richardson-Ayers, Hope, Ark., \$41,878; Independence County—9 mi. grading, Batesville-Pleasant Plains road, Ware Construction Co., Little Rock, \$86,345; Grant County—10 mi. Grant County-Cleveland County line, Pope & Lybrand, Sheridan, Ark., \$82,629; Saline County—4 mi. Benton-Malvern road, S. E. Evans, Clarksville, Ark., \$25,744; Cleveland County—concrete bridge on Pansy-West road, C. H. Atkinson Paving Co., Chillicothe, Mo., \$5,916; Logan County—concrete bridge on Dardanell-Paris road, Maxwell Construction Co., Columbus, Kansas, \$26,074; Marion County—steel bridge on Flippin-South road, Blackshire & Blackshire, Harrison, Ark., \$31,029; Craighead County—bridge on Lake City-Leachville road, Bunnell & Mack, Paragould, Ark., \$15,780; Hot Spring and Montgomery Counties—9 mi. Hot Springs-Glenwood road, G. W. Nichols, Hot Springs, \$63,646.

Ark., Pine Bluff—City let contract to J. P. McNulty, 214 Cherry St., Pine Bluff, to grade and pave with concrete streets in Paving Dist. No. 99.

Ark., Van Buren—Kaw Paving Co., has

contract for $\frac{1}{2}$ mi. road, Crawford County, from end of free bridge south to sector already paved; to concrete Highways No. 64 and 71, from Van Buren to Fort Smith city limits. Address Crawford County Commrs.

Ark., Van Buren—Hinson Brothers, Muskogee, Okla., have contract to grade and improve Fine Springs to Mountainburg Highway; W. T. Barry, Dist. State Highway Engr.

Ga., Waycross—State Highway Dept., East Point, let contract to McDougald Construction Co., 180 $\frac{1}{2}$ Spring St., Atlanta, at \$129,859, for 4-in. asphalt on Central Dixie Highway between Waycross and Bacon County line; W. R. Neel, State Highway Engr. 9-8

Fla., Bartow—Stidham & Hughes, Lakeland, Fla., have contract at \$106,745 for 10 $\frac{1}{2}$ mi. widening and rebuilding Fort Meade-Frost-proof road with Bartow clay base, 1-in. binder, 1 $\frac{1}{2}$ -in. sheet asphalt.

Fla., Hollywood—City Comm., C. C. Freeman, Mgr., let contract to Godcharles and Darrow, Hollywood, at \$97,148, for street improvement.

Ga., Alma—State Highway Dept., East Point, let contract to MacDougald Construction Co., 545 Angler Rd. N. E., and 180 $\frac{1}{2}$ Spring St., Atlanta, at \$129,839, for 9-mi., 4-in. asphalt topping on road between Alma and Waycross.

Miss., Macon—City, W. A. Tibbs, Clk., let contract to August Bodeker to pave Rutherford St., Burke to Vine; to Hannibal Contracting Co., Hannibal, Mo., to pave Pace Ave. and McKay St.

N. C., Lexington—City Comm., R. P. Earnhardt, Clk., let contract to Benfield Bros., Moncure, at \$8165 to grade, curb, gutter, top soil and catchinlets pave and install catch basins on about 6 blocks on Raleigh Road, from North Main to North Church St. 10-20

Okla., Tecumseh—Pottawatomie County Commrs., A. W. Goar, Chmn., reported, let contract for 2 gravel roads: 6 mi. Tribbey-Trousdale, T. W. Keller; 8 mi. Maud-Way, T. W. Kellacher. 10-27

Okla., Tulsa—Tulsa County Commrs. let contract to Western Construction Co., First National Bank Bldg., Oklahoma City, at \$88,347, for 3-mi. paving near Peoria Ave. and Thirty-first St.; to D. T. Allen, at \$10,308, for grading; A. C. Hays, at \$10,472, to grade 5 mi. Turkey Mountain Highway; E. G. Fike & Sons, at \$10,575, for culverts on same road.

S. C., Greenville—City, C. F. Watson, Mayor, let contract to Ballenger Paving Co., Emacee Bldg., to pave East McBee Ave. between Church and junction of McBee Ave. and Washington St.

Tex., Ballinger—Brown & Root, Georgetown, have contract at \$100,000 for 25 blocks paving; 55,000 sq. yd. 50-ft. 6-in. gravel base, 1 $\frac{1}{2}$ -in. rock asphalt top; concrete curb and gutter.

Tex., Brenham—Washington County Commrs. let contract to A. A. Davis & Co., 410 Medical Arts Bldg., Oklahoma City, to concrete Washington Highway from Kuykendall Creek toward Brenham.

Tex., Cameron—City let contract to Brown & Root, Post Dispatch Bldg., Houston, for paving 100 blocks in residence section. Address City Clk. 10-27

Tex., Cuero—Terrell Bartlett Engineers, Calcasieu Bldg., San Antonio, reported, has contract for Highway No. 81.

Tex., Dallas—City Comm. let contract to Uvalde Paving Co., Sante Fe Bldg., at \$90,000, to pave 7 streets, including Hope, Goodwin, Alta.

Tex., Houston—City, W. A. Moore, Sec., let contract to Scott Shambaugh, 1401 Dowling St., at \$52,404 to pave Harvard St., with bituminous surface, from Third to Twentieth; to Kall-Inla Paving Co., at \$16,172, for bituminous surface on Euclid St., Michaux to Beauchamp, Houston Heights.

Tex., San Angelo—City, E. V. Spence, Mgr., let contract to L. E. Whitham & Co., 1901 Austin St., Wichita Falls, at \$309,504, for 35 blocks street paving; 7 and 6-in. reinforced concrete. 10-20

Tex., San Benito—City, J. Scott Brown, Mayor, let contract to Dodds & Wedegartner, at \$50,000 for 16 blocks concrete paving. 10-6

Va., Roanoke—City, Charles D. Fox, Mayor, let contract to Campbell & Peters, at \$18,000, for laying sidewalks on various streets. 7-21

W. Va., Fairmont—Ralph W. Fimple, Country Club Road, Fairmont, has contract for 1200 ft. pavement in Hampton Roads, from Pennsylvania Ave.; 16-ft. wide, 7-in. concrete, concave surface.

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

Ala., Montgomery—City, reported, receives bids in Nov. for concrete and vitrified clay sewers, and in Dec. for pipe for Southern outfall sewer; J. M. Garrett, Engr.

Ala., Prichard—Mobile Construction Co., Meaker Bldg., Mobile, reported, has contract for laying sewer pipe along Conception Rd.

Ark., Arkadelphia—Paving Dist. No. 4, Board of Commrs., reported, let contract to Phoenix Construction Co., Fort Smith, for street improvements and storm sewers in 65 blocks. 10-13

Ark., Corning—Improvement Dist. No. 1, reported, received low bid from Ryan & Rickard, for sewer system; Jas. R. Rhyne, City Engr.

Ark., DeWitt—Sewer Improvement District No. 1, Board of Commrs., reported, plans installing sewer system; cost \$65,000.

Ark., Fort Smith—City, J. H. Parker, Mayor, reported, expend \$84,000 for sewer system.

Ark., Hot Springs—South Hot Springs and Oaklawn Sewer & Improvement District, reported, plans constructing 11 miles of sewers and 7 miles of water mains; H. S. Moreland, 625 Mutual Bldg., Kansas City, Mo., Consult. Engrs.

Ark., Little Rock—Sewer Improvement District No. 102, Board of Commrs., F. M. Mason, Sec., 701 W. Thirty-second St., reported, receives bids Dec. 1 for sewers; Hugh Carter, Engr., Exchange Bank Bldg.

Ark., Malvern—See Water Works.

Fla., Pensacola—City, John B. Jones, Attorney, votes Dec. 13 on \$75,000 sanitary and storm sewer bonds.

Ga., Brunswick—City voted \$50,000 bonds for extension of sewerage system. See Financial News—Bond Issues Proposed.

Ga., Metter—J. B. McCrary Engineering Corp., Atlanta, has contract for sewer system; Shearman Concrete Pipe Co., Savannah, for sewer pipe; U. S. Cast Iron Pipe Co., Birmingham, Ala., for cast iron pipe; W. T. Wright, Metter, for brick and cement; Mutual Foundry & Machine Co., Atlanta, for castings. 11-3

La., Bastrop—City, reported, vote soon on bonds for extending sewage system. Address The Mayor.

La., Baton Rouge—City, reported, vote in March on bonds for sewer along University Lake; cost about \$180,000. Address Common Council.

Miss., Forest—Town, R. L. Noble, Clk., receives bids Dec. 8 for storm sewers, street paving, water mains and appurtenances. See Want Section—Bids Asked.

Miss., Meridian—See Roads, Streets, Paving.

Mo., Lebanon—City, reported, plans sewer system; Russell & Axon, Consult. Engrs., McDaniel Bldg., Springfield.

Mo., St. Joseph—Board of Public works let contract to Gunite Concrete and Construction Co., 1301 Woodswether Rd., Kansas City, Mo., at \$35,000 for repairs to sewer system; Leslie Engineering Co., Engrs., 820 $\frac{1}{2}$ Felix St. 11-3

Mo., St. Joseph—Riley Contracting Co., reported, has contract at \$85,825, for Hickory St. relief sewer.

Mo., St. Louis—See Water Works.

N. C., Hendersonville—Druid Hills District, reported, install storm sewer system; voted bonds. Address Druid Hills Comm.

Okla., Blair—City, reported, plans installing sewers, Imhoff tank, disposal plant, etc. Address The Mayor.

Okla., Claremore—City, reported, defeated \$53,000 sewer bonds. Address Mayor. 9-1

Okla., Edmond—City, reported, extend sewer system; F. H. Peckham, Engr., 225 W. Grand St., Oklahoma City. 6-30

Okla., Lawton—City, reported, plans installing concrete sewers on various streets; G. Dale, Engr.

Okla., Ponca City—City, reported, plans sewers in District No. 58; W. H. Crawford, Engr.

Okla., Wellston—City, reported, voted \$33,000 sewer bonds. Address The Mayor.

Tenn., Knoxville—City, reported, let contract about Nov. 15 for Sequoyah Hills

storm sewer drainage project; W. W. Myatt, City Engr.

Tex., Alvin—J. H. E. Jephson, Sec. Chamber of Commerce, reported, interested in sewer system; town may vote on bonds.

Tex., Amarillo—City, Marvin Nichols, Asst. City Engr., reported, construct 28 mile sewer line for San Jacinto Country Club and Roberts Place.

Tex., Amarillo—Dobson & Humphreys, Lincoln, Neb., has contract for 20,000 ft. of 21-in. vitrified tile sewers and Green-Boots Construction Co., Amarillo, for concrete tile. 10-6

Tex., Hemphill—See Water Works.

Tex., Houston—City, J. C. McVea, City Engr., reported, repair sanitary sewer system on Rosalie St.

Tex., Pampa—City, reported, opens bids soon for 15 miles sewer mains and disposal plant. Address The Mayor.

Tex., Yoakum—City votes Dec. 5 on \$250,000 sewer extension bonds. Address The Mayor.

Va., Portsmouth—G. W. Bryan & Co., Commercial Bldg., have contract at \$13,593 for installation of terra cotta pipe sewers, extension to Port Norfolk sewer.

Street Railways

D. C., Washington—Harley P. Wilson, reported, officially submitted to Public Utilities Comm., John W. Childress, Chmn., plans for merger of local transportation systems, proposes organization under Congressional charter of new street railway corporation to take over properties of Washington Railway & Electric Co. and all properties of Capital Traction Co. and Washington Rapid Transit Co.

Telephone Systems

Ga., Savannah—Southern Bell Telephone & Telegraph Co., reported, will erect new exchange building on Drayton and Abercorn St.; J. A. T. Son's Sons, 725 Wheaton St., has contract for razing old building, clearing ground and excavation.

Ky., Fancy Farms—Peoples Telephone Co., incorporated; S. T. Ross, C. I. Carrio, E. F. Cash.

Mo., Kansas City—Southwestern Bell Telephone Co., has permit for 2-story addition, 7100 Main St., cost about \$35,000.

S. C., Beaufort—Inter-Mountain Telephone Co., Johnson City, Tenn., reported, purchased the Beaufort telephone exchange; now controls exchanges in Marino, Gate City, Bristol, Elizabethton and Mountain City, Tenn.

Tennessee—Associated Telephone Utilities Co., Marshall E. Sampsell, Pres., offering \$1,750,000 15-year 5% gold debentures, Series B, price 95 and interest, to yield 5 1/4%; 25,000 shares \$6 cumulative prior preferred stock (no par value), price 92 and accrued dividend, to yield 6.52% through Paine, Webber & Co., New York, Boston and Chicago, and Mitchum, Tully & Co., San Francisco and Los Angeles; proceeds from sale of securities will be used to pay part for acquisition of the entire issued and outstanding shares of common stock (except directors' qualifying shares) of Peoples Telephone and Telegraph Co., Kansas State Telephone Co., Michigan Home Telephone Co. and Commercial Telephone Co. and for other corporate purposes. The Associated Telephone Utilities Co., incorporated in Delaware, controls through stock ownership a group of public utility properties serving without competition except in Tennessee a total population in excess of 1,000,000 in California, Wisconsin, Illinois, Michigan, Kansas and Tennessee; the subsidiary companies are engaged primarily in the telephone business, operating 79,631 stations in more than 129 communities.

Tenn., Greeneville—Continental Telephone Co., St. Paul, Minn., reported, acquired properties of Greeneville Independent Telephone Co.; plans making improvements and operate.

Tex., Belton—Sparta Telephone Co., Inc., capital \$10,000, chartered; James A. Ferguson, Clem C. Countess, W. O. Coe.

Tex., Big Springs—Southwestern Bell Telephone Co., main office, St. Louis, Mo., reported, receiving bids for 2-story and basement building, 53x53-ft., brick and reinforced concrete, stone trim; D. B. Hull, Engr., Dallas.

Tex., Chillicothe—Southwestern Bell Telephone Co., main office St. Louis, Mo., reported, acquired Chillicothe Telephone Co.; franchise extended for 25 years.

Tex., New Braunfels—Danville Telephone Co., Inc., chartered; Alvin Schaefer, L. E. Kneupper, Edwin Sahm.

Va., Richmond—East Coast Telephone, Inc.,

chartered; Lloyd C. Pulley, Jr., E. J. Mace, Lee Sharpe, all Waverly, Va.

Textile Mills

Ga., Ellijay—Chamber of Commerce and C. W. Smith, Calhoun, reported, considering establishment of textile mill.

Ga., Sandersville—Lake B. Holt, Pres., First National Bank, reported, negotiating with Northern capitalists for establishment of textile mill.

N. C., Burlington—Albert M. Johnston, of Natl. Life Insurance Co., 231 S. La Salle St., Chicago, Ill., and June Harden, Burlington, reported, interested in establishing rayon mill.

N. C., Greensboro—White Oak Cotton Mills, reported, erect \$25,000 finishing plant; 1 story, brick, composition roof.

N. C., Kinston—Kinston Cotton Mills Co., acquired Kinston Cotton Mills; no new building or machinery contemplated. 11-3

N. C., Lexington—W. O. Burgin, Pres. Chamber of Commerce, J. C. Grimes, Lexington, and John Egbert, Philadelphia, Pa., reported, interested in organizing company with \$100,000 capital, for erection of silk mill; acquired silk mill at Paterson, N. J., will remove machinery to local plant.

N. C., Statesville—Gagner Mfg. Co., Henry Gagner, Pres., Adams, Mass., reported, remove silk throwing plant, rayon processing plant and weave plant; erect building.

S. C., Anderson—Appleton Mfg. Co., D. D. Little, Treas., advises it is proposed to remove approximately 30,000 spindles and 850 looms from Lowell, Mass., to Anderson, giving local plant 62,000 spindles and 1900 looms; contracts let to Townsend Lumber Co., Anderson, and Potter & Shackelford, Charlotte, N. C., for necessary extension of present mill buildings and a cloth room and warehouse; also proposed to erect around 200 houses for employees, also new office building; contracts for dwellings and office building not let; J. E. Sirrine & Co., Engrs., Greenville. S. C. 11-3

S. C., Greenville—Southern Pyle Fabric Co., reported, let contract to Gallivan Building Co., Greenville, for plant; cost of building and equipment \$150,000. 10-27

S. C., Travelers Rest—Woodward-Baldwin Interests and Aug. W. Smith, Brandon Mills, Greenville, reported, will probably install machinery of Renfrew Mfg. Co., Adams, Mass., in local plant. 11-3

S. C., Taylorsville—Piedmont Print Works, capital \$1,000,000, incorporated; M. M. Rogers, L. A. Irwin, W. G. Singer, Wilmington, Del.; will erect textile fabric plant; plans being prepared by J. E. Sirrine & Co., Engrs., Greenville; contract to be let in next few weeks. 10-27

S. C., Union—Sidney M. Edelstein & Co., Industrial Engr., advises that construction work has started on plant of Pioneer Braid Corp., Joseph M. Adlman, Pres.; building will be standard mill construction, 1 story, 20,000 sq. ft. floor space; building is owned by Pioneer Holding Corp., and construction by day labor; machinery and equipment for plant is to be moved from New York. 11-3

S. C., Ware Shoals—Ware Shoals Mfg. Co., reported, increased capital, \$1,300,000 to \$2,000,000.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.

Ala., Atmore—City votes Nov. 14 on \$20,000 water works bonds. Address The Mayor.

Ala., Bessemer—City, reported, plans water works supply system. Address The Mayor.

Ala., Mobile—C. W. Soost, Supt. of Water Works Dept., recommended installation of parallel 24-in. main from Blenville pumping station to reservoirs and increased boiler equipment at Spring Hill Station.

Ala., Tuscaloosa—City, M. G. Kersh, Clk., votes Dec. 12 on \$350,000 bonds for changing source of water supply from Warrior River to Yellow Creek. See Want Section—Machinery and Supplies.

Ark., DeWitt—Board of Commrs., reported, plans installing complete water system; cost \$60,000.

Ark., Fort Smith—City, J. H. Parker, Mayor, Wynkoop Kiersted, Const Engr., 614 Interstate, Kansas City, Mo., reported, construct water dam across Poteau River, cost \$50,000.

Ark., Hot Springs—See Sewer Construction.

Ark., Malvern—McEachin & McEachin, Little Rock, reported, has contract for water and sewer extensions; J. E. Cox, Engr.

Fla., Lynn Haven—City let contract to Ebersbach Construction Co., Panama City, at \$187,398 for water works; O. H. Long, Engr., Moultrie, Ga. 10-20

Fla., Panama City—City defeated water works bonds. See Financial News—Bond Issues Proposed.

Ga., Macon—City, Board of Water Commrs., reported, plans extending line to serve new sections.

Ga., Ochlocknee—Town, reported, let contract to W. R. McGrew & Co., Thomasville, for installing system of water works. 10-29

Ga., Smyrna—City voted \$35,000 water works bonds; construct system; P. M. Edwards, Mayor.

Ky., Central City—E. S. Mays, Springfield, reported, acquired Central Gas and Water Co.'s water works.

Miss., Forest—See Sewer Construction.

Miss., Lumberton—Layne-Central Co., Memphis, Tenn., has contract for constructing 10-in. artesian well for Edward Hines Lumber Co., for new water supply.

Miss., New Albany—Layne-Central Co., Memphis, Tenn., is erecting complete water system including deep well and pumping machinery; cost \$15,687.

Miss., Ripley—City, reported, plans water works plant; cost \$50,000. Address The Mayor.

Miss., Ripley—City, S. Butler, Mayor, votes Nov. 25 on bonds for water works. 10-27

Mo., Lockwood—Alexander Engineering Co., reported, has contract for survey for water system; will vote in Dec. on proposition.

Mo., Marcelline—City voted \$48,000 water works bonds; construct filtration plant. 9-29

Mo., Ozark—City, reported, plans voting on bonds for water and sewer improvements. Address The Mayor.

Mo., Springfield—Springfield City Water Works Co., 810 Boonville St., reported, let contract to Burgess & Niple, Columbus, Ohio, for concrete dam in connection with improvements to water supply on 600-acre tract on north fork of Sac River; dam will form lake 2 1/2 miles long and 800 ft. wide; cost of entire project \$300,000. 9-15

Mo., St. Louis—Murch Brothers Construction Co., 1759 Railway Exchange Bldg., has contract at \$250,000 for building coagulating house at Howard Bend; 60x140 ft.; 2 stories, Bedford stone, reinforced concrete construction, interior enameled brick; Study & Farrar, Archts., Arcade Bldg., St. Louis. 11-3

N. C., Asheville—Howerton Engineering Co., Engrs., Medical Bldg., reported, making survey for creation of additional water supply to serve city and all of Buncombe county; plans for development program for Pink Beds in Pisgah National Forest approved in tentative form.

N. C., Charlotte—Thomasboro Community Water Works, Inc., capital \$10,000, incorporated; E. L. Wingate, Thomasboro, W. R. Price, G. N. Neely.

Okla., Blair—City, reported, having surveys made for water works. Address The Mayor.

Okla., Clinton—City, reported, plans extending water works system; D. S. Eliff, Engr.

Okla., Cordell—Western Construction Co., First National Bank Bldg., Oklahoma City, reported, has contract for water works improvements. 8-25

Okla., Mangum—Common Council, reported, considering installation of equipment and pumping machinery in water works, cost \$75,000.

Okla., Oklahoma City—City, E. M. Fry, Mgr., reported, extend water mains on Locust and Catalpa Sts.

Tenn., Kingsport—City, reported, engaged Wiedman and Singleton, Atlanta, Ga., as engineers for new water supply.

Tenn., Petersburg—City voted \$25,000 water works bonds. Address The Mayor.

Tenn., Selmer—City, Terry Abernathy, Mayor, reported, votes soon on bonds for water works.

Tex., Amagillo—Prideaux-Platt Lumber Co., 700 Steffens St., has contract for 3 houses on Palo Duro pumping station property. 10-6

Tex., Crystal City—City, R. A. Taylor, plans issuing short term notes to cover cost of proposed repairs to city's dam No. 2; plans not matured.

Tex., Del Rio—Homer B. Jones, reported,

acquired water works system from East Side Water Co.; plan improvements.

Tex., Devine—City, M. E. DuBoise, Mayor, receives bids Nov. 15 for pumping equipment and piping. See Want Section—Bids Asked.

Tex., Fort Worth—Hawley & Freeze, Cotton Exch. Bldg., Fort Worth, reported, has contract for engineering work in connection with construction of 2 dams and reservoirs, to care for flood water at Fort Worth and adjacent points in Trinity River Valley; total expenditure proposed \$6,500,000.

Tex., Goose Creek—City, reported, soon receive bids for water works and sewer improvements. Address The Mayor. 10-13

Tex., Hemphill—Town, reported, install water works and sewerage system. Address The Mayor.

Tex., Lindale—City votes Nov. 14 on water works bonds. See Financial News—Bond Issues Proposed.

Tex., Lufkin—City Commrs., reported, let contract to Chicago Bridge & Iron Works, Chicago, Ill., for 400,000-gal. tower in North Lufkin.

Tex., Menard—City, reported, considering piping water from Wilkinson Springs, distance of 8 miles; improve water system. Address The Mayor.

Tex., Rowena—City, reported, plans installing water works system. Address The Mayor.

Tex., San Angelo—West Texas Utilities Co., Abilene, reported, expend \$300,000 for water improvements.

Tex., Teague—City, reported, let contract to Airmaide Well Co. for drilling water well; cost \$14,071.

Va., Lynchburg—City, R. W. B. Hart, Mgr., reported, replace wooden gravity line with cast iron pipe.

Woodworking Plants

Fla., Tampa—Florida Orangewood Products, Inc., chartered; Gordon C. Hunt, 4521 Rosemere St.; R. LaVallen; manufacture wood products.

N. C., Wilmington—E. W. Godwin & Son, Castle Hayne Road, reported, plans erecting new plant to manufacture Climax bottoms and covers for crates, etc.; install electrically operated machinery, increase daily output over present mill, which is about one carload.

N. C., Wilmington—W. A. Corbett, Atkinson, N. C., reported, acquired package plant of E. W. Godwin & Son, Castle Hayne Road; plans enlarging; present daily capacity of 3000 crates will be tripled; install electrically operated machinery; purchase includes package plant, good will and 12-acre site; employ about 100 persons.

Va., Front Royal—The Locust Pin Co., Inc., B. J. Hillidge, Treas., advises will rebuild burned plant immediately; machinery all purchased. 11-3

Va., Norfolk—Wood Products—Wood Manufacturing Co., Inc., capital \$50,000, chartered; Jos. D. Wood, W. P. Ford, 326 Church St., C. E. Herbert, 536 New York Ave.

Va., Norfolk—Stephenson & Taylor, Arcade Bldg., B. W. Shelton, Pres., reported, acquired site on Virginia Beach Blvd.; establish plant to manufacture truck packages.

FIRE DAMAGE

Ala., Deposit—Cotton gin, seed house and sack mill plant of J. E. McCaleb; loss \$10,000.

Ala., Gadsden—Rev. J. W. Brown's residence.

Ark., Arkadelphia—Portion of Arkadelphia Milling Co.'s plant; loss \$10,000.

Ark., El Dorado—Arcade Building, owned by J. S. Alpha; loss \$50,000.

Ark., Pine Bluff—Dwelling near Noble Lake owned by Well Estate, care Harry C. Well, Noble Lake Blvd., occupied by Buster Downs; loss \$12,000.

Ga., Atlanta—J. M. Carmichael's furniture factory, 296 Lee St. N. W.

Ky., Hopkinsville—Pennroyal Building, Planters Hardware Co. and other buildings; loss \$1,000,000.

Ky., Louisville—Ninth and Hill Streets M. E. Church South; loss \$9000.

Ky., Milburn—Ben Brent, Jr.'s residence.

La., Bastrop—Campbell House, owned by Miss Tina Collins; loss \$10,000.

La., New Orleans—Bone plant and storage sheds of Armour Fertilizer Works, Carondelet Bldg.; loss \$100,000.

Miss., Union—Post Office, Postmaster L. M. Taylor's residence, and other buildings.

Md., Rock Point—Rock Point Hotel, F. C. Stonestree, Propr.; loss \$20,000.

Mo., Doniphan—Warehouse of Whitwell-Moore Mercantile Co., Odd Fellows Hall, Booker Chevrolet Co., Blue Bird Cafe, Red Bird Cafe, J. R. Jacob store, J. R. Wright & Son, undertaking establishment; loss \$100,000.

Mo., Cainesville—Weldon Flour and Grist Mill; loss \$25,000.

Mo., Garden City—O. Y. Smith Hardware store, Bank of Garden City and Wilhite store; loss \$100,000.

Mo., St. Louis—Economy Laundry Co's plant, 412 S. Broadway; loss \$12,000.

Mo., St. Louis—Residence of Chas. B. Spalsbury, Pres., Johnson, Stephens & Shinkle Shoe Co., 4242 Laclede St.; loss \$140,000.

N. C., Lincolnton—School building at Goodsonville; address Lincoln County Board of Education.

N. C., Winston-Salem—Boys' dormitory, laundry, kitchen, dining room and smokehouse at Memorial Industrial School, on Wallburg Road; W. J. Poinexter, Supt.

S. C., Charleston—Store of F. N. Basha & Bro., King and Wolfe Sts.; loss \$25,000.

Tenn., Chattanooga—Van Deman Building at Eighth and Market Sts., owned by American Trust & Banking Co., Scott Probasco, Vice-Pres.; loss \$60,000.

Tenn., Columbia—Corn mill and warehouse of Park Brothers; loss \$35,000.

Tex., Denton—Keenon Hotel, J. H. Keenon, Propr.

Tex., Graham—Main storage room of Morrison Lumber Yard.

Tex., Hallettsville—City Hotel building; loss \$20,000.

Tex., Harlingen—Peoples Gin, Adams and B Sts., owned by People's Gin Co.

Tex., Houston—A. F. Randall Co.'s garage, 72 Heights Blvd.; C. E. Gardner's Auto Painting and Top Works, 70 Heights Blvd.; total loss \$25,000.

Tex., Paris—Paris Candy Co.'s plant; loss \$665,000; W. H. P. Anderson, Pres.

Tex., Pecan Gap—Southland Cotton Oil Co.'s plant; loss \$30,000.

Tex., Tankersly—Reed & Philan's cotton gin; loss \$10,000.

Tex., Terrell—W. F. Lewis' residence, Rose Hill community, 9 miles from Terrell; loss \$10,000.

Tex., Tyler—Mecca Cafe, owned by Haddad Brothers; loss \$25,000.

Tex., Wrightsboro—W. C. Huffines' garage and filling station; loss \$15,000.

Va., Christ Church—Store and post office, owned by A. L. Brooks; loss \$6000.

W. Va., Chester—Bisque kiln department of Taylor, Smith & Taylor Pottery Co.; loss \$25,000.

W. Va., Martinsburg—Kirkson's men's store on Queen St.; loss \$20,000.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Ark., Fort Smith—Masonic Home Assn., Inc., Eighth and A Sts., Robt. L. Secrest, Sec., start work about Jan. 1 on \$300,000 temple, N. 11th St. near B St.; Indiana limestone, 2 stories and basement, site 177x120 ft., 63-720 sq. ft. floor space; offices, waiting and reading rooms, lodge rooms, rest room, auditorium seat about 1200 on first floor, lodge rooms above; Geo. R. Mann, Wanger & King, Archts., A. O. U. W. Bldg., Little Rock; Haralson & Nelson, Asso. Archts., Merchants Bank Bldg., Fort Smith. 8-18

D. C., Washington—Salvation Army, Inc., 607 E St. N. W., plans building, 119 Pennsylvania Ave., to replace Reliance Hotel; Capt. Ernest R. Holz, Div. Comdr.; Clarence L. Harding, 1629 Colb Rd. N. W., Archt. 8-18

Miss., Greenwood—Greenwood Masonic Temple Building Assn., C. E. Couty, Chmn., Bldg. Comm., plan to sell bonds for \$85,000 building; inaugurate fund campaign November 15. 11-18-26

Miss., Picayune—Young Men's Christian Assn., Lamont Rowlands, Chmn., Finance Comm., having plans drawn by Rathbone DeBuys, Archt., Hibernia Bank Bldg., New Orleans, La., for \$60,000 building; brick, 1 and 2 stories; gymnasium, swimming pool, showers, lockers. 11-3

Mo., St. Louis—Knights of Pythias, care St. Louis Lodge Deputies Assn., R. E. Mackey, Chmn., Bldg. Comm., have plans for \$1,000,000 Pythian Tower nearing completion; brick, rein. concrete, steel and stone, 7 stories and basement, 150x150 ft., foundation to carry 20 stories, promenade roof, high-speed elevators; Trueblood & Graf, Archts., 1517 Chemical Bldg.; Brussel & Viterbo, Const. Engrs., 1630 Arcade Bldg. 1-20

Tex., Austin—Salvation Army, Capt. Damon Nichols, has low bid at \$11,000 from Weise Bros., 2604 Red River St., for building; low plumbing and wiring bids from Fox-Schmidt at \$796 and \$248; structure brick veneer, stud partitions, papered interior, 2 stories, 40x60 ft., cement and wood floors, grade beam foundation, 10-yr. composition roof; Page Bros., Archts., Austin Natl. Bank Bldg. 10-27

Bank and Office

Ga., Waycross—H. C. Bunn erect office building, Pendleton and Elizabeth Sts.; 3 stories, basement, mezzanine and pent house, 82x65 ft. with 35x10-ft. wing, concrete floors and slabs, common and face brick, hollow tile back-up walls, struct. steel columns, beams, etc.; Roy A. Benjamin, Archt., Bisbee Bldg., Jacksonville, Fla.; bids in Nov. 7.

La., Monroe—Peoples Homestead and Savings Assn., I. T. Davis, Pres., 318 DeSiard St., receives bids Dec. 3 for 1-story and mezzanine building, DeSiard and Catalpa Sts.; cost \$80,000 to \$100,000, stone finish, brick, 40x90 ft., marble and terrazzo floors, steel sash, bronze doors, vaults and bank fixtures; owner's quarters and 1 store.

Mo., Kansas City—Southwestern Bell Telephone Co., E. D. Nims, Pres., St. Louis, probably let contract in few days for steel frame for 13 additional stories to 14-story administration and equipment building; also probably call for general bids after Nov. 15; terra cotta exterior, concrete floors, 125x90 ft., new heating system, new elevators, plumbing and electric wiring, metal windows throughout addition; cost \$1,062,000; Hoyt, Price & Barnes, Archts., Davidson Bldg., Kansas City; I. R. Timlin, Asso. Archt., Telephone Bldg., St. Louis. 8-25

Mo., St. Louis—Morris Roufa, 801 Morgan Ave., reported, plans store and office building, Franklin and Jefferson Aves.

Mo., St. Louis—Andrew Sansone, 6048 Delmar St., reported, considers store and office building, Westgate and Melville Aves.

Okla., Tulsa—Dr. C. W. Day, 502 S. Boulder Ave., purchased site adjoining Medical Arts Bldg. under construction, Boulder Ave., as future site for automobile storage building and additional office building; sketches drawn.

Tex., Dilley—Dilley State Bank, J. M. Crutchfield, Pres., receives bids Nov. 17 for brick and rein. concrete bank and store building; 1 story, 50x120 ft.; Phelps & DeWees, Archts., Gunter Bldg., San Antonio. 10-20

Churches

Ala., Sulligent—Baptist Church erect brick building; 2 stories, 60x80 ft., wood floors, composition roof, steam heat; Bem Price, Archt., Age-Herald Bldg., Birmingham.

Ark., Clarendon—Presbyterian Church remodel building damaged by flood; H. Ray Burks, Archt., Home Ins. Bldg., Little Rock.

Ark., Mountain Home—Baptist Church plans \$15,000 stone building; 1 or 2 stories. Address The Pastor.

Ark., Prescott—First Methodist Church having plans drawn by Witt, Seibert & Halsey, Texarkana Natl. Bank Bldg., Texarkana, for \$40,000 building, W. Main and W. Third Sts.; brick, 2 stories, cut stone trim. 7-21

D. C., Washington—Metropolitan A. M. E. Church, 1516 M St. N. W., has \$15,000 permit to remodel building; new steel trusses in roof, repair and alter interior. Address The Pastor.

Fla., Jacksonville—Springfield Presbyterian

Church receives bids Nov. 15 for 3-story building; cost \$60,000; Mellen C. Greeley, Archt., 32 W. Forsyth St.; following contractors estimating: W. T. Hadlow, 32 W. Forsyth; D. D. Thomas & Son, Lutz Bldg.; Arthur Perry, Jr., Bissie Bldg.; R. J. Gallepie, Baldwin Bldg.; W. D. Gerbrich & Co., 325 W. Forsyth St.; N. Snelson, 2948 Park St.; J. L. Ponder, 3880 Knight St.; H. S. Baird, 3658 Oak St.; S. S. Jacobs Co., Lutz Bldg. 10-20

Ga., Savannah—Aspen Lutheran Church, Rev. C. A. Linn, Pastor, to consider plans Nov. 27 for Sunday school, Drayton St.; Levy & Clarke, Blum Building, Archts. 5-26

Ga., Woodbury—Baptist Church, Rev. Wilson A. Grubbs, Pastor, plans 14-room Sunday school addition.

Ky., Louisville—Ninth and Hill Streets M. E. Church South, Rev. B. F. Atkinson, Pastor, plans rebuilding structure noted burned at \$9000 loss.

La., Bernice—First Baptist Church opens bids Dec. 1 for brick building; cost \$20,000, some stone, 3 stories, 56x96 ft., wood, pine or hardwood floors, concrete foundation, asbestos roof; furnishings, equipment, etc., \$5000; plans by office James E. Greene (deceased), Birmingham, Ala. Address R. L. Cook, Bernice. See Want Section—Building Material and Equipment. 10-27

La., Jena—Third Street Baptist Church plans \$40,000 building. Address The Pastor.

La., Ruston—First Baptist Church, T. A. Green, Chmn. Bldg. Comm., receives bids Nov. 17 for alterations and repairs to church and erecting annex; plans and specifications from Pastor.

Miss., Boonville—Methodist Church, Murray Gresham, member Bldg. Comm., erect \$40,000 brick building; 2 stories, steel truss, wood floors, composition roof, steam heat; Brodie & Surmann, Archts., 1316 Comer Bldg., Birmingham, Ala.

Miss., Carrollton—Presbyterian Church erect 3-room annex to building. Address The Pastor.

Mo., Dexter—Christian Church, Rev. A. A. Hedges, Pastor, erect brick building; 2 stories; Gill & Jackson, Archts., 520 Buder Bldg., St. Louis.

Mo., Higbee—Methodist Episcopal Church erect brick veneer, hollow tile and concrete building; 30x50 ft.; Berger Bros., Archts., Hannibal.

Mo., St. Louis—Serbian Eastern Orthodox Church, Rev. Saphrony Calaban, Pastor, 1408 N. 11th St., erect brick and steel church and parish house, Geyer and McNair Sts.; terra cotta trim, 2 stories and basement, 60x93 ft., concrete foundation, maple flooring, vacuum heat; C. L. Thurston, Archt., 130 Kenilworth St., Webster Groves.

N. C., Durham—West Durham Baptist Church plans building. Address The Pastor.

N. C., Proximity, Greensboro—Proximity M. E. Church has \$20,000 permit to repair building. Address The Pastor.

N. C., Siler City—Siler City Baptist Church, Rev. J. C. Canipe, Pastor, plans \$75,000 building; raising funds.

N. C., Winston-Salem—St. Paul's P. E. Church, Rev. R. E. Gribbin, Rector, erect building, Five and One-Half and Summit Sts.

Okla., Duncan—First Christian Church erect \$70,000 building; brick, stone and concrete, 2 stories; Sorey & Vahlberg, Archts., Oklahoma City.

Okla., Stillwater—Church of Christ, Scientist, has low bid for \$75,000 building from P. F. Gross, Cushing; brick and rein. concrete, 1 story and basement, 48x90 ft. 10-27

S. C., Columbia—First Baptist Church, Jas. McDonald, member, Bldg. Comm., has plans by Harold Tatum for \$75,000 Sunday school; 2 stories, 21x80 ft., 51 classrooms; accommodate 1200 to 1500. 4-21

S. C., Columbia—Washington Street M. E. Church receives bids Nov. 14 for brick Sunday school; cost \$100,000, limestone trim, 3 stories, accommodate about 1000, connected with church by passageway; Casey & Pant, N. Main St., Anderson, and Lafaye & Lafaye, 1224 Sumter St., Columbia, architects; following contractors estimating: W. R. Cray, 1226 Sumter St.; J. T. Dabbs, 301 Saluda Ave.; J. C. Heslep, 2129 Divine St.; W. R. Summersett, Holly St.; Rutherford-Innes, Co., Mechanics Construction Co., Carolina Bank Bldg., all Columbia; C. M. Guest & Son, Anderson; Bryson-Webber, Spartanburg, S. C.; T. C. Thompson & Brothers Co., 609 N. Smith St.; Palmer-Spivey Construction Co., 404 S. Tyron St., all Charlotte, N. C.; North-Eastern Const. Co., Nissen Bldg., Winston-Salem, N. C. 11-3

Tenn., Lawrenceburg—First Baptist Church erect brick and stone building; foundation under way; 2 stories; receiving sub-bids;

plans by Sunday School Board, Southern Baptist Convention, Nashville, Tenn.

Tenn., Memphis—Prescott Avenue Presbyterian Church has low bid from B. F. Holmes, Commercial Bank Bldg., for church and Sunday school addition; Geo. Mahan, Jr., Archt., 700 American Bank Bldg. 11-3

Tex., Brady—Church of Christ, Rev. W. F. Cawyer, Pastor, erect \$15,000 building; hollow tile and brick, 1 story, 55x70 ft., concrete foundation, tile and composition roof, wood floors; Will N. Noonan Co., Archt., Bldrs. Exchange, San Antonio; about ready for bids.

Tex., Fort Worth—Texas Christian University plans church.

Tex., Fort Worth—Arlington Heights Baptist Church, Rev. Bryan Robinson, Pastor, erect frame building.

Tex., Houston—South End Christian Church enlarge building; Hedrick & Gottlieb, Archts., Post-Dispatch Bldg.

Tex., San Antonio—Highland Park Lutheran Church, M. R. Haynes, Chmn., Bldg. Comm., plans \$10,000 basement unit of building, Hammond and New Braunfels Ave.; Seutter & Simons, Archts., Bldrs. Exchange.

Tex., Trinity—Building Committee receives bids Nov. 10 at office W. T. Haralson, Sec., Trinity, for church; plans and specifications from S. W. Ray, Archt., Jacksonville, Tex.

Tex., Wichita Falls—Highland Heights Christian Church, Dr. Paul Henry Packard, Pastor, soon start work on \$100,000 Sunday school unit of building; Sunday school accommodate 1200; main auditorium seat 1200.

Va., Staunton—Central M. E. Church, South, erect Sunday school. Address The Pastor.

Va., Virginia Beach—Presbyterian Church erect stucco building, 22nd St. and Pacific Ave.; brick trim; Philip B. Moser, Archt., Law Bldg.; Meyers & Meyers, Contrs., both Norfolk.

City and County

Ala., Birmingham—Board of City Commissioners receives bids Nov. 15 at office Bem Price, Archt., Age-Herald Bldg., for fire station, Steiner Ave. and 14th St. S. W., West End. 9-29

Ark., Little Rock—Pulaski County Quorum Court, A. M. Lund, Foreman, Grand Jury, recommend new jail.

Fla., Boynton—Town Commission, E. L. Winchester, Clk., receives bids Nov. 16 for bathing casino; frame, hollow tile and stucco, about 50x180 ft., 2 stories, cement floors, concrete foundation, tile roof; first unit cost \$15,000; plans and specifications from King & Campbell, Archts., 507½ Clematis St.; Chas. Perochet, Landscape Archt., both West Palm Beach.

Fla., Chipley—Washington County Commissioners receiving bids for courthouse; cost \$200,000; Frank Lockwood, Archt., Montgomery, Ala. 6-23

Fla., Pensacola—City, J. H. Bayliss, Mayor, votes in Dec. on \$50,000 library bonds; also on \$25,000 stadium bonds. 11-3

La., Alexandria—Rapides Parish Police Jury may order bond issue for courthouse and jail.

La., Baton Rouge—Commission Council of Baton Rouge, L. J. Ricard, Commr. of Finance, City Hall, receives bids Nov. 15 for 2-story concrete and frame combined field and bath house, City Park; plans and specifications from Lewis A. Groz, Archt., 206 Raymond Bldg.

Mo., Clayton, St. Louis—St. Louis County votes Nov. 29 on \$12,750,000 bonds, including \$1,000,000 for county hospital and \$750,000 for jail and office space. Address County Commrs. 10-6

Mo., St. Louis—Municipal Auditorium Advisory Commission has approved design for \$5,000,000 municipal auditorium from 14th to 15th Sts. south, from Market St. to Clark Ave.; 322x493 ft., 3 stories, 162 ft. high to ridge line, trusses, main section 90 ft. to ceiling and 270 ft. wide; auditorium seat about 12,000, entrance to which will be by 6 ramps; music hall to seat 3500; Bedford stone exterior; plans by Plaza Commission, Inc. 11-12-25

Okla., Ardmore—City Commission remodel building for jail.

Tex., Alice—City, A. S. Anderson, City Clk., have plans ready about Dec. 15 for \$10,000 city hall; hollow tile, stucco and rein. concrete, 2 stories; Hardy & Curran, Archts., Nixon Bldg., Corpus Christi. 9-29

Tex., Pharr—City Commission soon start work on city hall.

Tex., Greenville—Hunt County Board of Commrs. selected Page Bros., Austin Natl. Bank Bldg., Austin, as associate architects

for \$400,000 courthouse and jail; steel, concrete and brick, probably 5 or 6 stories; W. R. Ragsdale, Archt., Greenville. 10-27

Tex., Houston—City Secretary receives bids Nov. 9 for training tower for fire dept.; cost \$15,000; brick and rein. concrete, 5 stories and basement, 20x20 ft., sprinkler system; Brickey, Wiggins & Brickey, Archts., 2103 Esperson Bldg. 10-6

Tex., Perryton—Ochiltree County Commissioners' Court, Dave Shanks, Clk., P. O. Box 468, will decide about courthouse plans at meeting Nov. 14. 11-3

Tex., Stinnett—Hutchinson County Commissioners' Court receives bids Nov. 26 for courthouse and jail; cost \$200,000 to \$300,000, probably 3 stories, with jail on top floor; plans and specifications from office County Auditor and from W. C. Townes, Archt., Old Post Office Bldg., Amarillo.

Tex., Texas City—City voted \$100,000 city hall and auditorium bonds; Mission type, stucco, 1 and 2 stories, auditorium seat 1000, soundproof jail on ground floor, library, office, etc.; Page Bros., Archts., Austin Natl. Bank Bldg., Austin. 10-20

Tex., Wharton—City plans city hall and fire station. Address City Council.

Va., Richmond—American Legion, Col. John A. Cutchins, Law Bldg., member, interested in stadium; plan to sell \$150,000 athletic tickets.

W. Va., Clarksburg—City, Geo. L. Coyle, City Mgr., has plans by E. J. Wood & Son, Archts., Lowndes Bldg., for \$80,000 Italian type central fire station; fireproof, 2 stories and basement, 43x97 ft., stone and face brick, tile floors, gymnasium, showers, 50-ft. hose tower, 3 entrances in front, 1 in rear. 6-16

Dwellings

Ala., Birmingham—John S. Cox, 630 Idlewild Circle, opens bids Dec. 1 for stone and brick residence, Rock Ridge Park; cost \$50,000; 2 stories and basement, hardwood and tile floors, stone foundation, slate roof; Turner & McPherson, Archts., Martin Bldg., work start Jan. 1. See Want Section—Building Material and Equipment. 9-8

Ala., Birmingham—Art-Craft Building Co., care P. S. Mewhinney, Pres. and Archt., 1014-15 Woodward Bldg., erect several dwellings, connection with development; brick veneer, 2 stories and basement, 70x26 ft., slate, tile and oak floors, concrete or tile foundations, slate or tile roofs; cost \$20,000; Sam C. Malloy, Engr., 1014-15 Woodward Bldg. 11-13

Ala., Birmingham—C. O. Mitchell, Tarrant City, erect brick veneer residence, Overlook and Woodvale Rds., Forrest Park; 2 stories, 54x51 ft., wood floors, slate roof, steam heat; Brooke B. Burnham, Archt., Age-Herald Bldg.

Ark., Eureka Springs—A. G. Ingalls, Crescent Hotel, considers erecting number dwellings, apartments and garage; frame, 2 and 3 stories, 5-room apartments, composition shingle roofs, oak floors, tile baths, cost \$5000 to \$20,000 each; A. O. Clark, Archt., Rogers.

Ark., Little Rock—Laurence Auten, Moore & Turner Bldg., erect Colonial residence, 520 N. Elm St.; wide wing, 2 stories, 30x50 ft., oak floors, tile bath, shingle roof; Tom Harding, Archt., Home Ins. Bldg.

Ark., Little Rock—Kramer Darragh, 2412 Broadway, erect stucco and stone residence, Edgehill Place; 2 stories, oak floors, tile or composition shingle roof; Tom Harding, Archt., Exchange Bank Bldg.

Ark., Little Rock—M. O. Gardner, 2706 S. Van Buren St., erect \$10,000 residence, 5325 Sherwood Rd.

Ark., Little Rock—Miss Ellen Williams erect frame residence and garage, 315 N. Park Ave.; 1 story, 28x48 ft., oak floors, shingle and composition roofs; Wm. Van Valkenburgh, Archt., 212 W. Second St.

Ark., Pine Bluff—Well Estate, Noble Lake Br., care Harry C. Well, probably rebuild dwelling near Noble Lake noted burned.

Ark., Stephens—Baptist Church considers frame parsonage; 1 story, 6 rooms. Address The Pastor.

D. C., Washington—Cooley Bros., 927 Fifteenth St. N. W., has permit for 5 brick and tile dwellings, 3801-09 Benton St. N. W.; 2 stories; total cost \$25,000.

D. C., Washington—Edwin Jacobson, 1302 L St. N. W., has permit for 2 frame dwellings, 3508-10 Quesada St. N. W.; 2 stories; total cost \$15,000.

D. C., Washington—M. S. McConibe, Dresden Apt., has \$23,000 permit for stone and tile residence, 2446 Kalorama Rd. N. W.; 3 stories.

D. C., Washington—Oscar A. Parkins has

permit for 3 frame dwellings, 2510-14-27 Palmer Place S. E.; 2 stories; total cost about \$10,000.

D. C., Washington—Mrs. E. E. Scott, 1356 Valley Pl. S. E., has permit for brick residence, 2310 High St. S. E.; 1 story; cost about \$10,000.

D. C., Washington—Gratz B. Strickler, Colorado Bldg., has \$18,000 permit for residence, 3126 Ellicott St. N. W.; 2 stories, brick and tile.

D. C., Washington—S. M. Williams has \$24,000 permit for 4 brick dwellings, 518-26 Peabody St. N. W.; 2 stories.

Fla., Jacksonville—W. H. Kendrick erect 2 dwellings, 4545-4648 Ramona St.; 1 story, brick; cost \$5500 each.

Fla., Jacksonville—Dr. C. A. Knight, Professional Bldg., erect residence, San Jose; Marsh & Saxelbye, Archts., Consolidated Bldg.; bids in.

Fla., Jacksonville—M. L. Goodwin, 250 King St., erect \$15,000 residence; stucco, 2 stories.

Fla., Miami—Durrett Properties, Inc., erect \$16,000 dwelling and garage; 2 stories.

Fla., Miami Beach—Walter J. Gano, Archt., erect \$20,000 residence, 5300 N. Bay Rd., LaGorce sub-division.

Fla., Palm Beach—Walter Richardson, Colean Bldg., erect \$10,000 residence.

Fla., Palm Beach—Henry Seligman, 151 Sunset Ave., erect \$10,500 addition to residence, Floral Park.

Fla., St. Augustine—Herbert E. Wolfe, Oak St., erect \$50,000 Colonial residence, Miramar sub-division.

Fla., St. Petersburg—B. S. Fenner erect 2 bungalows, 3204-3212 Seventh Ave. North; cost \$7500 each.

Ga., Atlanta—Chas. M. Marshall, 16 Brookhaven Drive, alter and erect additions to residence; Pringle & Smith, Archts., Norris Bldg.; bids in Nov. 8.

Ga., Rome—Ruden Towers remodel and erect additions to residence; 2 stories and basement, brick; Lockwood & Poundstone, Archts., Forsyth Bldg., Atlanta.

La., New Orleans—C. Barthe, 601 Jefferson Ave., considers 2 double cottages.

La., New Orleans—Henry Montegut, 2214 Touro St., erect double cottage, Law St. near Burgundy St.

La., New Orleans—Mary R. Hume erect \$21,000 residence, 1427 Fourth St.; 2 stories, 52x37 ft., hollow tile, slate roof; Moise H. Goldstein, Archt., 1105 Hibernia Bank Bldg.

La., New Orleans—Moise H. Goldstein, Archt., Hibernia Bldg., receives bids Nov. 11 for 2-story, brick veneer dwelling, 421 Audubon St.

La., New Orleans—Mrs. R. Pierce, 830 Union St., erect 3 duplexes, Pitt St. near Jena St.; 49.6x27.6 ft., 2 stories, asbestos roof; total cost \$16,500.

La., New Orleans—Elroy Trost, 4934 Tonti St., considers two 1-story and basement dwellings, State St.

Md., Baltimore—Geo. C. Karn, 2521 Bel Air Rd., erect residence, Atwick and Wingate Rds., Keswick.

Md., Baltimore—Michael Norton, 4512 Main Ave., erect number brick dwellings, Pen Lucy Ave.

Md., Baltimore—Geo. W. Schoenhals, Munsey Bldg., erect 15 brick dwellings, 600 blocks Craycombe Ave. and W. 38th St.; 2 stories; total cost \$35,000.

Miss., Hazlehurst—L. B. Alford erect 1-story residence, East Hazlehurst; W. M. Carlson, Archt.

Mo., Independence—Judge Brown Harris, care Jackson County Circuit Court, plans country home, 25-acre tract in southwest section of Jackson County.

Miss., Jackson—Dr. Geo. Adkins, care Jackson Infirmary, erect \$12,000 brick veneer residence; 2 stories, 32x52 ft., wood floors, composition shingle roof; Claude H. Lindsay, Archt., Lamar Life Bldg.

Mo., Kansas City—E. A. Clarkin, 2320 Benton St., erect 2 dwellings, 631-35 Romany St.; cost \$7500 each.

Mo., Kansas City—T. F. Willis, Pres., Willis & Weber Paper Co., 11th and Mulberry Sts., purchased homesite, 62d and Summit Sts., Hampstead Gardens.

Mo., St. Louis—St. Roch's R. C. Church, Rev. John P. Spencer, Pastor, remodel and erect addition to rectory, 6052 Waterman Ave.; brick, 2 stories and basement, 35x59 ft., stone foundation, slate roof, 4 tile baths, vapor heat, electric refrigerator; A. B. M. Corrubia, Archt., 1373 Arcade Bldg.

Mo., St. Louis—Wm. F. Greenwald, Gravois

Rd., near Watson Rd., erect \$11,000 brick residence, Gravois and Geyer Rds.; 2 stories and basement, 35x40 ft.; Gill & Jackson, Archts., 520 Buder Bldg.

Mo., St. Louis—Mr. King, care Adolph Stauder, Archt., 6032 S. Kingshighway Blvd., erect \$25,000 Spanish type residence; hollow Glenn Sts., St. Louis County; 2 stories and basement, 32x50 ft.; bids in.

Mo., University City, St. Louis—C. L. Thurston, 130 Kenilworth Ave., Webster Groves, drawing plans for \$13,000 brick residence, Kingsbury St. near Hanley Rd.; brick, 2 stories and basement, 29x36 ft., hardwood floors, tile roof, hot water heat.

N. C., Andrews—Geo. P. Hoblitzell started work on residence.

N. C., Andrews—A. L. Fancher, P. O. Box 353, considers erecting 12 or 15 dwellings.

N. C., Asheville—Frank Cox, 24 Government St., and others purchased 26 lots, Beverly Hill sub-division on Black Mountain Highway; soon erect six \$10,000 dwellings; additional dwellings later.

N. C., Durham—Jas. O. Cobb erect \$30,000 residence, Forest Hills; masonry, 12 rooms.

N. C., Durham—E. Nachamson erect \$16,000 residence, Minerva Ave. near Watts St.; tile and stucco, 12 rooms.

N. C., Greensboro—A. K. Moore Realty Co., 218 W. Market St., erect 2 brick veneer and 1 frame dwelling, Berkley Place, Camden Rd. and Springwood Drive; 1 story, 6 and 7 rooms; total cost \$19,000.

N. C., High Point—J. Elwood Cox, Pres., Commercial National Bank, erect English type residence, Emerywood; brick, limestone trim, Vermont slate roof, 2 stories; Northrup & O'Brien, Archts., Starbuck Bldg., Winston-Salem; bids in.

N. C., Winston-Salem—C. E. Hancock, 627 Hawthorne Rd., erect \$11,000 residence, Oaklawn Ave.; 6 rooms.

N. C., Winston-Salem—G. O. Steifel, 627 E. 16th St., erect 9-room residence, Hawthorne Rd.; cost about \$10,000, brick veneer, brick foundation, 2 stories, 9 rooms.

Okla., Ada—Dr. Catherine Brydia erect \$16,500 residence; 2 stories and basement, brick; Albert S. Ross, Archt.

Okla., Oklahoma City—R. C. Cavitt, 331 N. Rob., erect \$10,000 residence; brick veneer, 1 story; Sorey & Vahlberg, Archts.

Okla., Tulsa—L. E. Smith, Inc., 2246 Terwilliger Blvd., erect \$15,000 dwelling, 2416 South St. Louis St.

Okla., Tulsa—Hal Crouch, Kennedy Bldg., erect \$23,000 residence, 2448 South St. Louis Ave.; 2 stories.

Okla., Tulsa—W. H. Garvin erect residence, 2003 E. 12th Place; cost about \$10,000.

S. C., Charleston—C. Bissell Jenkins, 52 Murray Blvd., reported, erect residence, Riverland Terrace.

S. C., Greenville—Piedmont Print Works, Harry R. Stephenson, Mgr., erect 60 operatives' dwellings, Enoree River; J. E. Sirrine & Co., Engrs.

Tenn., Memphis—R. E. Palmer, Fidelity Bank Bldg., rebuild burned residence; 2 stories and basement, oak floors, composition shingle roof, tile bath, hot-water heat.

Tex., Alice—Claude McGill erect \$12,000 residence; brick, tile, 1 story, 5 rooms, 2 baths, garage, servants' quarters and laundry; Hardy & Curran, Archts., Nixon Bldg., Corpus Christi.

Tex., Austin—Murray Graham, 1221 Marshall Lane, erect \$20,000 residence; brick and stone, 2 stories, oak and edge grain pine floors, tile baths, concrete foundation, hot water heat; Edwin C. Kreisle, Archt., Scarbrough Bldg.

Tex., Beeville—M. F. Vance considers erecting 4 cottages.

Tex., Brownsville—Mr. Skelton, care Skelton Abstract Co., 203 Merchants Bank Bldg., erect \$25,000 Spanish type residence; hollow tile and concrete, rein. concrete foundation, 2 stories; Page Bros., Archts., Austin Natl. Bank Bldg., Austin, and Brownsville.

Tex., Dallas—Porter Lindsley, 3807 Miramar St., announced plans for 3 English type dwellings, Greenway Park; 8 rooms, cost \$25,000 to \$30,000 each; work start in few days.

Tex., Electra—Ed Payton erect residence, Enterprise community, 9 miles from Electra.

Tex., Electra—W. T. Waggoner erect \$35,000 residence; 2 stories, 50x65 ft., servants' house and garage, hot air furnace; Voelcker & Dixon, Archts., 4 Kahn Bldg., Wichita Falls; bids in.

Tex., Fort Stockton—Mrs. G. W. Rose considers residence.

Tex., Houston—C. Bauer, 2218 E. Alabama

St., erect 2-brick veneer duplexes and garages, 1754-56 Brannard St., Lancaster Place Extension No. 3; 12 rooms, 2 stories; cost \$12,000 each.

Tex., Houston—C. A. Dupree, 830 Arthur St., erect \$10,000 brick veneer residence and garage, 3433 Noble addition; 7 rooms and bath.

Tex., Houston—W. R. Fulton erect 2 frame dwellings and garage, 2418-2422 Hazard St.; 2 stories, 12 rooms; total cost \$18,500.

Tex., Houston—L. T. Gibbs, Bankers Mortgage Bldg., erect 2 brick veneer duplexes and garages, 1713-15, 1721-23 Kipling St., Willow Place addition; 10 rooms, cost \$6000 each.

Tex., Houston—R. S. Curtiss, Bldr., Chicago, Ill., reported, plans 500 bungalows; cost \$2800 each.

Tex., Houston—J. F. W. Michaux, Montrose Apts., erect frame and stucco residence, Southmore Blvd.; Louis P. Hosserand, Archt.; bids in.

Tex., Houston—W. H. Irvin, Pres., Citizens State Bank, erect \$25,000 residence, Galveston Bay, Bayridge; Jos. Finger, Archt., Keystone Bldg.

Tex., Houston—Woodson Realty Co., 914 Franklin St., erect \$65,000 brick veneer dwelling and garage, 2055 Sul Ross Ave.

Tex., Mercedes—Mrs. Lorraine W. Allen, St. Louis, Mo., erect \$20,000 residence; hollow tile and stucco, Spanish type, 2 stories, tile roof; R. Newell Waters, Archt., Weslaco, Tex.; bids in.

Tex., Port Arthur—H. L. Warren, Bldr., erect 7 dwellings, 17th St. and W. 13th St.; total cost about \$15,000.

Tex., San Antonio—Willard E. Simpson, care Willard E. Simpson Co., Natl. Bank of Commerce Bldg., having plans drawn by Robt. B. Kelly, Travis Bldg., for \$20,000 residence, Rosewood Blvd., Oakmont; stone, 1 and 2 stories, tile roof, concrete foundation. 11-3

Tex., San Antonio—R. I. Wirtz, 139 Magnolia Drive, let contract to U. H. Wagner, 101 W. Pecan St., for English type residence, Olmos Park Estates; 2 stories, field stone, half timber and stucco, concrete foundation; Kelwood Co., Archt., Travis Bldg., have plans complete in few days.

Tex., San Antonio—Clifton George, Jr., 728 E. Houston St., erect field stone, half timber and stucco residence, Olmos Park Estates; 2 stories, 9 rooms, concrete foundation; Atlee B. & Robt. M. Ayres, Archts., Bedell Bldg.

Tex., San Antonio—W. Martinez, 701 S. Leona St., erect brick and hollow tile residence, 1500 block W. Woodlawn Ave.; 2 stories, concrete foundation; Seutter & Simons, Archts., Bldrs. Exchange.

Tex., Quanah—West Texas Utilities Co., Abilene, Tex., erect 6 or more dwellings.

Government and State

Ala., Birmingham—Following contractors estimating on remodeling work at post office, bids opened Nov. 25 by Treasury Dept., Washington, D. C.: Thos. W. Cissel, Bethlehem Trust Bldg., Bethlehem, Pa.; Hugh M. Smythe, 1918 I St. N. W., Washington; King Lumber Co., Charlottesville, Va.

Ark., Conway—Arkansas National Guard, Joe S. Harris, Adj. Gen., Pine Bluff, erect \$46,000 armory.

D. C., Washington—Public Buildings Commission approved plans of Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., for \$17,000,000 Department of Commerce building and \$10,000,000 Department of Internal Revenue building; former between B. D. 14th and 15th Sts.; plans provide structure 1030x350 ft., 5 stories to entablature with sixth story back of roof balustrade, basement, stone; York & Sawyer, Archts., 100 E. 42d St., New York; plans for Internal Revenue building between 10th, 12th, B and C Sts., call for structure 450x400 ft., with same height and type of architecture, stone constr.; Edw. H. Bennett, 80 E. Jackson Blvd., Chicago, Ill., consulting architect for both structures. 10-7-26 and 2-17

Fla., Pensacola—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., reported, probably ask bids in January for remodeling post office.

N. C., Raleigh—State, A. W. McLean, Gov., selected Atwood & Nash, Archts., Chapel Hill and Raleigh, to draw plans for fair buildings; cost \$200,000; Prof. Ross Schumaker of Dept. of Architecture, State College, to assist Archts.

Tenn., Johnson City—Following contractors

estimating on remodeling and enlarging post-office; bids opened Nov. 22 by Treasury Dept., Washington; D. C.; Thos. W. Cissel, Bethlehem Trust Co., Bethlehem, Pa.; Johnson City Foundry & Steel Co.; Burleson & Laws, both Johnson City; Wm. MacDonald Construction Co., 1811 Synd. Trust Bldg.; A. M. Lundberg, 208 N. Broadway, both St. Louis, Mo.; Unkefer Brothers Construction Co., Inc., 1020 Bessemer Bldg., Pittsburgh, Pa.; Newport Engineering & Construction Co., Newport News, Va.; King Lumber Co., Charlottesville, Va.; W. D. Lovell, 1415 Eighth St. S. E., Minneapolis, Minn.; V. L. Nicholson Co., 102 W. Clinch Ave., Knoxville, Tenn.; Pyle Bros., Kingsport, Tenn. 11-3

Tenn., Tullahoma.—Tennessee National Guard, Nat. H. Dye, Major, U. S. P. & D. O. Contracting Officer, Nashville, receives bids Nov. 30 for following at Camp Peay: Drilling and installing 3 wells, 115 ft., \$1912; installing electric lighting system, \$2000; constructing 5 bathhouses and latrines, \$10,000; constructing transportation shed, \$5500; concrete floor in 19 mess halls, \$4104. 7-14

Hospitals, Sanitariums, Etc.

Ala., Birmingham—Jefferson County Board of Revenue, Lacey Edmundson, Chmn., considers \$100,000 nurses' home, Hillman Hospital. 10-27

Ark., Little Rock—Dr. A. W. Strauss, Exchange Bank Bldg., having plans drawn by Eugene J. Stern, 1821 Broadway, for fireproof clinic, Capitol Ave. and Cumberland St.; about 14 rooms. 10-20

Ga., Augusta—City Council receives bids Nov. 10 (extended date) or \$150,000 nurses' home, University Hospital; Scroggs & Ewing, Architects., Southern Finance Co. Bldg. 10-27

Ga., Milledgeville—State Sanatorium, Dr. R. C. Swint, Supt., selected Shi Engineering Co., Macon, to make survey and map of properties for \$500,000 sanatorium. 9-8

Miss., Jackson—Mississippi Hospital Removal, Improvement and Land Sale Commn., R. L. Brown, Sec., Box 40, receives bids Nov. 21 for heating, plumbing and wiring for \$500,000 third group of buildings for \$4,500,000 Mississippi Insane Hospital; plans and specifications from N. W. Overstreet, Archt., Miss. Fire Bldg., Jackson; Henry C. Muskopf, Landscape Archt.-Engr., 864 Newport Ave., St. Louis, Mo.; contract for radial brick chimney for power house let to Rust Engineering Columbia, Birmingham, Ala., at \$7025. 11-3

Mo., St. Louis—Board of Public Service, E. R. Kinsey, Pres., ready for bids latter part of Nov. for brick addition to boiler house, City Hospital, 5300 Arsenal St.; 1 story, 60x53 ft., concrete foundation, terra cotta trim, composition roof; Albert Osburg, Archt.; L. R. Bowen, Engr. 8-13

N. C., Marion—Marion General Hospital, W. Main St., C. F. James, Pres., erect brick and tile hospital; 3 stories, 36x100 ft., steam heat, 1 elevator. 6-30

N. C., Winston-Salem—Junior League, Mrs. Wm. Oliver Spencer, Jr., Pres., 510 Brookstown Ave., raising funds for \$80,000 hospital for incurables. 6-30

Tex., Austin—St. David's Hospital, Dr. J. C. Thomas, Chmn. Plans Comm., 606 W. 17th St., erect \$100,000 annex. 10-13

Tex., Mineral Wells—Carr P. Collins, Pres., Crazy Water Hotel Co., let contract to Jopling-Marshall Construction Co., Fidelity Union Bldg., Dallas, for \$200,000 hospital and clinic; 6 stories, 140x60 ft., 50 beds, offices, laboratories, etc.; Lang & Witchell, Architects., American Exch. Bank Bldg., Dallas. 8-13

Tex., Pecos—Reeves County votes Dec. 10 (extended date) on \$40,000 hospital bonds. Address County Commrs. 10-13

Tex., Point Isabel—Dr. A. W. McCandless, Carbondale, Ill., reported, considering tentative plans for \$300,000 convalescent hospital; X-ray and pathological laboratory, physiotherapy dept. 10-13

Hotels and Apartments

Ala., Montgomery—Southern Apartment Co. of Birmingham will erect \$50,000, 24-family apartment building on Clanton Ave. 10-27

Ark., Hot Springs—Madame Irene Alford and Dr. P. M. Wellman, Woodley Row, have plans by F. J. W. Hart for \$35,000, 100x150-ft., 1-story, stucco and stone apartment and court building; tile roof, oak floors. 10-27

Ark., Mt. Mena—Hugh H. Smith, Fort Smith, purchased Hotel Wilhelmina, will remodel. 10-27

Ga., Cartersville—R. V. Grayson, Archt., Atlanta, completed plans for remodeling of Park Hotel, F. E. Jennings, owner; \$15,000 to \$20,000. 10-27

Ga., Moultrie—Community Hotel Co. has plans in progress by T. F. Lockwood, Moultrie Bldg., Columbus, for \$150,000 hotel building. 10-27

Ga., Ocella—T. A. Crouch, contemplating conversion of Georgia State Bank-Hudson Bldg., into 24-room hotel. 10-27

Ky., Covington—Preston J. Bradshaw, Archt., St. Louis, Mo., will probably draw plans for proposed \$800,000, 9-story, 231-room hotel, Scott St. between Sixth and Pike Sts., through arrangement with Strauss & Co., 30 N. Dearborn St., Chicago, Ill.; 14 stories on ground floor with lobby on second floor; also contain ballroom to accommodate 400 persons, main dining room with capacity of 200, lounge, etc.; promoters have raised \$100,000 and propose to dispose balance of Hotel Co. securities by sale of stock. 10-27

Ky., Lexington—Sidney Delaney, 122 Ransom Ave., erect \$10,000, 2-story, brick veneer, 12-room apartment house at E. High St. and Tremont Ave., Hollywood. 10-27

Ky., Louisville—W. E. Bingham, 2011 Kenilworth, erect \$12,000, brick apartment addition at 2312 Walterdale Terrace. 10-27

Ky., Louisville—L. Jacobson & Sons, 444 S. Fifth St., erect \$25,000 apartments at 509-11 Eastern Pkwy. 10-27

Ky., Louisville—H. J. Schelrich, 229-33 S. Fifth St., erect \$13,000, 3-story, brick apartment house at 1308 Everett Ave. 10-27

Ky., Paducah—George Langstaff, of Langstaff-Orm Lumber Co., 438 S. Second St., receives bids Nov. 15 for 10-story, 200-room hotel, Eighth St. and Broadway; Marr & Holman, Architects., Stahlman Bldg., Nashville. 9-8

La., New Orleans—J. J. Lagarde, Archt., Maritime Bldg., receiving sub-contract bids for 2 four-plex buildings on Cleveland Ave. for Charles A. Wagner, 1084 City Park Ave.; \$18,000. 10-27

Mo., Kansas City—Coates House Hotel, Arthur F. Stephenson, 10th and Broadway, lessee, expend \$50,000 for new fixtures and furniture. 10-27

Mo., St. Louis—Bush-Burns Realty Co., 1105 Chestnut, financed 86-unit apartment building for negroes, to be built at Sarah and Enright Aves. 10-27

Mo., St. Louis—Nathan Frank, Arcade Bldg., reported, contemplates erecting \$2,000,000, 500-room hotel, on recently purchased property fronting 338 ft. on Chestnut St. and proposed Union Station Plaza, with depth of 109 ft. on 19th and 20th Sts., Mr. Frank wires: "No further details; waiting for report of Commrs. on condemnation of property embracing Plaza." 10-27

N. C., Shelby—Mrs. H. T. Hudson purchased 125-ft. frontage on N. Lafayette St., will erect \$25,000, brick and stone, 3-story, 6-apartment building; 4 rooms, bath and kitchenette each, electric cooking range, electric refrigerator, hardwood and tile floors; plans drawn, soon receive bids. 10-27

Okla., Tulsa—A. E. Aaronson, 1029 E. 21st St., has plans in progress for \$500,000, 10-story, steel, reinforced concrete and terra cotta apartment building; architect's name not announced. 10-27

Tenn., Elizabethton—Crawford Alexander and J. E. Stack purchased Zenith Apartment, now partly finished, will increase to 17 instead of 13 apartments, change name to Sunset Hill. 10-27

Tenn., Knoxville—J. B. Reed, Journal Arcade, has plans in progress for 195x450-ft., 6-family apartment building on Kingston Pike. 10-27

Tenn., Lexington—Paul Parker, owner of Hotel Lexington, on N. Main St., has plans in progress by R. A. Heavener, Jackson, for 30-room, brick veneer hotel on present site. 10-27

Tex., Fort Worth—Dr. Edwin Davis, Holmes Bldg., erect \$12,000 brick veneer apartment building at 1520 Washington St. 10-27

Tex., New Braunfels—Joe Abrahams, Adolph Henne, Emil Fischer, members of committee planning \$75,000 hotel; Chamber of Commerce promoting. 10-27

Tex., Fort Worth—C. E. Porter, 1527 Owasso St., erect \$15,000, brick veneer apartment house at 3645 Crestline St. 10-27

Tex., San Angelo—Mrs. Cora Dalton, Tulsa, Okla., erect 3-story, 60-room hotel on 50x90-ft. site on W. Harris St. 10-27

Tex., Wortham—Hockenbury System, Inc., Harrisburg, Pa., and Chamber of Commerce conducting campaign for funds to erect \$90,000, 3-story, 35-room, fireproof hotel building. 10-27

Va., Lawrenceville—Chamber of Commerce, T. E. Warriner, Sec., promoting construction of hotel building; H. Radcliffe, C. W. Peebles and R. R. Clarke are members of committee. 10-27

Miscellaneous

Ky., Louisville—Kentucky State Fair Assn. has permit for \$23,000 concrete poultry building at 1300 Falls City Ave. 10-27

Miss., Meridian—P. J. Krouse, Archt., M. & W. Bldg., soon complete plans and specifications for \$25,000, 2-story and basement, frame Northwood Country Club building, for C. E. Buckley Land Co.; composition shingle roof, wood floors, steam heat. 9-1

Mo., Kansas City—Spring Street Corp. has permit for \$150,000 hockey rink at 3153 Wyandotte St. 10-27

Tex., Beaumont—Union Mission Association, Dr. H. A. Lehwald, Pres., St. Louis, Mo., plans to establish children's home on tract near Hamshire. 10-27

Tex., Brady—Brady Country Club receive new bids from members of Club only, for \$16,000, 1-story and basement, native stone country club; Beverly W. Spillman, Archt., Alamo Bank Bldg., San Antonio. 10-27

Railway Stations, Sheds, Etc.

Fla., Belleview—Seaboard Air Line Railway, W. D. Faucette, Ch. Engr., Norfolk, Va., reported, planning new station. 10-27

Railway Stations, Sheds, Etc.

Fla., Miami—Florida East Coast Railway Co., H. N. Rodenbaugh, Vice-Pres., St. Augustine, reported considering construction of passenger station, advises: "Not contemplating any construction work at this point." 11-3

Miss., Meridian—Meridian & Bigbee River Railway Co., Ewing D. Sloan, Ch. Engr., Neville Bldg., 23d Ave. and Fourth St., plans to erect passenger depot, freight depot, automobile unloading sheds, icing facilities and yards and tracks; cost in excess of \$100,000. 10-27

Schools

Ala., Birmingham—Board of Education, Dr. C. B. Glenn, Supt., acquired tract on South Highlands, between 12th and 13th Aves. South and 17th and 19th Sts., as site for \$1,000,000 Southside High School building; Warren, Knight & Davis, Architects., Empire Bldg. 10-27

Ala., Gadsden—Alabama School of Trades and Industries Board of Control, Watt T. Brown, Chmn., 1905 Fourteenth Ave., South, Birmingham, planning early construction of portion of program; construct Administration Building during winter; William H. Kessler, Landscape Archt. 10-27

Ala., Mobile—Parent-Teacher Association L. G. Adams, Pres., Carlin St., promoting plans for stadium and athletic field adjoining Mobile High School. 10-27

Ala., Phenix City—Board of Education, Lucien P. Staugh, Supt., receive bids in Dec. for \$50,000 High School; T. F. Lockwood, Archt., Columbus, Ga. 11-3

Ark., Pine Bluff—Jefferson County Board of Education, W. P. Keith, Supt., make extensive improvements to Watson Chapel School, erect \$3000, 2-room negro school at Swan Lake, \$3500 negro school at Wabbeseka, \$4000 school at Reydel. 10-27

D. C., Washington—District Commissioners, Room 509 District Bldg., opened bids for Gordon Junior High School at 45th and T Sts. N. W.; low bid of George E. Wyne, 1900 B St. S. E., at \$495,000, exceeds appropriation; A. L. Harris, Municipal Archt., District Bldg. 10-20

Fla., Tampa—Hillsborough County Board of Public Instruction receives bids Nov. 17 for \$60,000 addition to Ballast Point school; equipment and furnishings cost \$10,000; Frank C. Gallagher, Archt., Zack and Ashley Sts. 10-27

Ga., Columbus—T. Hicks Fort, Pres. of School Board, and E. B. Daniel, Supt., filed request for \$150,000 for construction purposes in 1928 and 1929 with City Commission; provide \$50,000 for grammar school in Wynnton section and similar amount for negro school; \$15,000 annex to McIlhenny school; \$13,000 for improvements to existing buildings. 10-27

Ga., Tifton—School Board has plans in progress by Daniell & Beutell, Healey Bldg., Atlanta, for \$50,000 High School building. 9-8

Ga., Valdosta—Sigma Chi Fraternity plans \$25,000 house on Fraternity Row, at Emory University, Dr. Harvey W. Cox, Pres. 10-27

La., Melville—See La., Opelousas. 10-27

La., Monroe—Board of Directors of Louisiana Training Institute plans to erect \$60,000 building for school and dormitory. 10-27

La., New Orleans—Wm. R. Burk, Archt., Balter Bldg., completed plans and specifications for 2-story, brick and cast stone trim, 8-room parochial school building, St. Bernard 10-27

Ave., for Our Lady of the Sacred Heart Catholic Church congregation, Rev. Anselm Maenner, rector; reinforced concrete foundation, structural steel, wrought iron, tin-clad doors, tile floors and waterproofing, composition and tile roofing.

La., Opelousas—St. Landry Parish School Board, W. B. Prescott, Supt., soon call for bids on 2-story, brick Grand Prairie High School and 1-story Prairie Ronde School; Herman J. Duncan, Archt., Alexandria; receive bids Nov. 28 for plumbing and heating and constructing 2 wings at Melville high school; Mr. Duncan, Archt.

La., Sarepta—School building, loss \$35,000. Address Board of School Trustees.

Md., Brunswick—Frederick County Board of Education, G. Lloyd Palmer, Sec., Frederick, rejected all bids for additions and alterations to High School; John B. Hamme, Archt.

Miss., Lexington—Board of Education planning to erect High School building.

Miss., Louisville—School Board, M. L. Neill, Supt. of Schools, call election Nov. 16 on \$100,000 bonds for new school.

Miss., Picayune—City voted \$80,000 bonds for 2 new elementary schools; N. W. Overstreet, Archt., Miss. Fire Insurance Bldg., Jackson.

Miss., Shubuta—Board of School Trustees, R. C. Weems, Pres., receives bids Dec. 1 for 1-story, brick and hollow tile, \$28,000 school building; 7 classrooms, library, science room, music room, auditorium; Bert Stuart, Archt., Meridian.

Mo., Novinger—Novinger Consolidated District voted \$35,000 bonds for new school building; address Board of Education.

Mo., Westphalia—St. Joseph's Roman Catholic Church, Rev. J. C. Mellies, Pastor, taking bids on \$25,000, 2-story and basement, 58x75-ft., 4-classroom and auditorium parochial school; Wessebecher & Hildebrand, Archts., 826 Buder Bldg., St. Louis.

N. C., Chapel Hill—University of North Carolina planning to remodel Memorial Hall.

N. C., Chapel Hill—University of North Carolina has plans in progress by Atwood & Nash, for \$1,250,000 library and class building.

N. C., Durham—Building Committee of School Board planning completion of Junior High School by extension of 2 wings, and closing end of wings to form rectangle; \$200,000; erect primary building on Holloway St. site at Hyde Park Ave.; completing plans for \$125,000 negro school in Hayti.

N. C., Durham—North Carolina College for Negroes, Dr. James E. Shepard, Pres., has \$200,000 available; plans to raise additional \$100,000 for new buildings.

Okla., Ada—Board of Education, Mabel Brownell, Clerk, receives bids Nov. 15 for \$190,000 school building.

S. C., Greenville—School Board purchased lot on Toy St. adjoining Hayne School, as site for future addition.

S. C., Spartanburg—Rev. T. J. McGrath, pastor of St. Paul's Catholic School, acquired site on Alabama St. for proposed parochial school.

Tenn., Knoxville—University of Tennessee, Col. William S. Shields, Chmn. Executive Committee of Board of Trustees, outlined 5-year building program to include: Boys' dormitory on Chamberlain site, Cumberland Ave. west of Temple; gymnasium and auditorium building; administration building to take place of South College and be located on Woodruff property; additional dormitory for girls on Strong hall property; college of education, north side Cumberland Ave.; new library building; new engineering unit; new science building; biology building; cost about \$200,000 each with exception of library which will cost about \$400,000.

Tenn., Nashville—Board of Education, Hume-Fogg High School Bldg., receives bids Nov. 10 for annex to Tarbox City School; Henry C. Hibb, Archt., American Trust Bldg.

Tex., Alpine—Sul Ross Normal College, W. H. Morelock, Pres., have completed plans about Nov. 10 for \$35,000, 1-story and part basement 70x100-ft. semi-fireproof gymnasium; Ralph H. Cameron, Archt., City Natl. Bank Bldg., San Antonio.

Tex., Arcadia—Galveston County Board of Education, O. E. Kennedy, Supt., Galveston, call election for consolidation of Arcadia, Alta Loma and Algon school districts and bonds for new school; cost \$30,000 to \$50,000.

Tex., Arlington—Board of Directors of North Texas Junior Agricultural and Mechanical College, T. O. Walton, Pres., re-

ceive bids Nov. 22 at office College Archt., College Station, for construction of Science Hall; plans and specifications at Builders' Exchanges, Dallas, Fort Worth, Houston and San Antonio, at office College Archt., and dean of College.

Tex., Canyon—Board of Regents of West Texas State Teachers College, H. A. Turner, Sec., Texas Bank and Trust Co., Austin, receives bids at Fort Worth on Nov. 28, for Educational Building; plans and specifications from E. F. Rittenberry, Archt., 301 Blackburn Bldg., Amarillo.

Tex., Denton—Board of Regents of College of Industrial Arts, Dr. L. H. Hubbard, Pres., selected Simons & Watkin, Lufkin, prepare plans for \$150,000 dormitory.

Tex., Dickinson—School Board, care L. L. Porter, Supt. of High School, soon start work on 4-room annex.

Tex., Harlingen—Board of Education, R. B. Hamilton, Sec., has plans in progress by Page Brothers, Austin, for 2 ward schools, cost \$125,000 each; \$400,000 bonds recently voted.

Tex., Houston—Lamar Q. Cato, Archt., Bankers Mortgage Bldg., preparing plans for 2-story, fireproof, reinforced concrete, brick and tile Junior High School in West University Place, Independent School District; \$80,000 bond election on Nov. 12; H. B. Schlesinger, Pres. School Board.

Tex., Odessa—Board of Education planning bond election for new \$150,000 high school and \$25,000 ward school.

Tex., Port Arthur—Port Arthur Independent School District Board of Trustees, H. O. Preston, Pres., selected Mark Lemon, Archt., 407 Construction Industries Bldg., Dallas, prepare plans and specifications for \$1,500,000 school building program; bonds voted.

Tex., San Antonio—San Fernando Cathedral, care Rev. Camilo Torrente, opened bids for erecting School and Auditorium Building, Laredo St., contracts not let and action deferred for 3 months; Leo M. J. Dielmann, Archt., 306 E. Commerce St.

Tex., Sonoma—School Board probably call bond election for new school.

Tex., Stinnett—Board of Trustees Stinnett Independent School District soon call for bids on \$75,000 school building.

Tex., Texas City—City voted \$150,000 High School bonds, include 16 classrooms and auditorium; Page Brothers, Archts., Austin Natl. Bank Bldg., Austin.

Tex., Uvalde—Board of Trustees of Uvalde Independent School District voted to build \$100,000 High School on Getty Street site, now occupied by Grammar School building.

Va., Richmond—C. P. Walford, Clerk and Supervisor of Richmond Public Schools, receives bids Nov. 25 for additions to J. E. B. Stuart School and Patrick Henry School; separate proposals for heating; plans and specifications from Charles M. Robinson, School Archt., Times-Dispatch Bldg.

Va., Richmond—School Board, W. Floyd Reams, Chmn., plans to open bids at Dec. meeting of Board for East End Junior High School; Doric design, 35 units, accommodate 1000 pupils; Charles M. Robinson Co., Archts., Times-Dispatch Bldg.

W. Va., Keyser—State Board of Control, J. S. Lakin, Pres., Charleston, receives bids Nov. 30 for 1-story and basement, 94x129.8-ft. Physical Education Building at Potomac State School; brick walls, exterior faced with pressed brick and trimmed with Indiana limestone; inside of main building lined with salt glazed brick, built-up roof, steel girders, columns and trusses; plumbing, gas fitting and heating will be combined under one separate contract; R. A. Gillis, Archt., Fleming Bldg., Fairmont.

Va., Alexandria—School Board probably reject all bids as too high, on \$40,000 school in Rosemont, to replace West End School; may build with city forces.

W. Va., Fairmont—Board of Education Fairmont Independent School District, Robert C. Jones, Pres., receives bids until Dec. 20 for High School building, combination grade and high for colored, 2 annexes to 2 elementary schools, etc.; William B. Ittner Co., Archts., Board of Education Bldg., St. Louis, Mo.

Stores

Ark., Hot Springs—J. K. LeCroy, Jackson St., has plans by F. J. W. Hart, Ark. Natl. Bank Bldg., for reinforced concrete, brick and stucco, 70x132-ft. store building, Central Ave.; 1 story, foundation for 4, composition or built-up roof, oak floors, steam heat.

D. C., Washington—Waddy B. Wood, Archt., 816 Connecticut Ave. N. W., preparing plans,

construction start in several months on 2-story building for United Cigar Stores Co. of America, at N. W. cor. 14th and H Sts. N. W.; company also planning building at N. E. cor. 14th and E Sts. N. W.

Fla., Jacksonville—Paul T. Zee, Syracuse, N. Y., excavating for store corner Beach St. and First Ave.

Ga., La Grange—Hutchinson & Mallory have low bid from Daniel Lumber Co.; at \$37,707, for 2-story and basement, brick, stone trim store and office building; composition roof, concrete and wood floors; Burge & Stevens, Archts., 101 Marietta Bldg., Atlanta.

Ga., Savannah—W. T. Broghtwell, Maxeys, Ga., planning new building at 23 Abercorn St.; tentative stage.

La., New Orleans—M. Buchwald, 1019 Fern St., alter and repair 2-story, brick and stucco store and residence on St. Bernard Ave.; \$10,000; Theard & Mathews, Archts., Balter Bldg.

La., New Orleans—A. Denapolis, 7829 Bel-fast St., make additions and alterations to building at 824 Baronne St.; \$10,000; E. D'Armas, Archt.

Md., Baltimore—J. W. Tottle, 321 W. Lexington St., purchased property at 36th St. and Elm Ave., Hampden; make improvements.

Miss., Ackerman—Mrs. Nora Rainey soon start work on store building; E. M. Barron probably erect 2 buildings.

Miss., Jackson—Frank P. Gates, Archt., Edwards Hotel, soon complete plans for \$20,000, 1-story store building; for J. A. Logue, 1604 W. Captain St.

Miss., New Albany—Will McGill purchased Old Rogers Hotel; replace with row of brick stores.

Mo., Kansas City—P. W. Siersdorfer, 316 Rialto Bldg., erect \$10,000 stores at 3100 E. 12th St.

Mo., Kansas City—O. O. Concannon, 6230 Indiana Ave., erect \$12,000 business building at 1514-16 Walnut St.

Mo., St. Louis—O. J. Popp, Archt., Arcade Bldg., preparing plans for \$13,500, 2-story and basement, 30x59-ft. store and apartment building, Kingshighway; concrete foundation, metal store front, oak and rubber tile floors, composition roof; owner's name withheld.

N. C., Winston-Salem—W. N. Reynolds has completed plans by Norhup & O'Brien, Archts., receive bids Nov. 15 for 2-story, 75x88 ft., 4-store and 4-office building, cor. Spruce and Fourth Sts.; reinforced concrete, fireproof, faced with Mount Airy granite, limestone and marble.

N. C., Winston-Salem—L. O. Spears erect store building on Cherry St.; cost about \$10,000.

Okla., Oklahoma City—Jay J. Dwyer of Dwyer Realty Co., 308 N. Robinson St., announced construction of 1-story, brick, 4-store building at N. E. cor. Ninth St. and Hudson Ave.; by V. V. Harris, Braniff Bldg., and C. H. Taylor, Medical Arts Bldg.

Tex., Brownsville—S. H. Kress Co., 114 Fifth Ave., New York city, will erect \$75,000, fireproof, brick store building; Co. architects preparing plans.

Tex., Fort Worth—L. R. Barton, 1511 Clover Lane, erect \$15,750 brick and stucco store at 1304-6 Evans St.

Tex., Houston—George F. Howard, Pres., San Jacinto Trust Co.; George R. Christie, of Christie & Hobby, Second Natl. Bank Bldg., and others, purchased 2-story, brick building at McKinney and Travis Sts.; will remodel; plan to replace with large structure in about 5 years.

Tex., Houston—Joseph Finger, Archt., Keystone Bldg., completing plans for 2-story store and apartment building at Washington and White Sts. for Hylo Investment Co.

Tex., San Antonio—H. Lee Ransom, H. H. Levy and W. M. Longini have following low bids on 1-story, concrete, stone-tile store building, Broadway and Elizabeth St.: Moeller & Weilbacher, \$19,998; plumbing, Jud & Ormond, \$1265; wiring, Braden-Hudson-Wangler, \$625; Robert B. Kelly, Archt., Travis Bldg.

Tex., Sinton—J. Milam soon start work on brick business building.

Tex., Sinton—J. M. Teague, Beeville, purchased 2 lots on W. Sinton St., plans to erect brick and hollow tile business buildings.

Va., Hopewell—Langhorn Brothers have permit for \$12,000, 2-story, 24-room store building, Broadway and Seventh St.; financed by Anthony and Ellades Real Estate Dealers; O. L. Edwards, Archt.

Va., Roanoke—W. T. Grant Co., 455

Seventh Ave., New York, leased property at 21-23 Campbell Ave. West; start remodeling Feb. 1.

W. Va., Clarksburg—Louis Olikier, Enrau Apartments, owner of People's Furniture Co., and Econom Furniture Store, purchased Nusbaum Bldg. on Third St., will make extensive improvements.

Theaters

Md., Baltimore—Ritz Amusement Co., operators of Ritz Motion Picture Theater at 1607 N. Washington St., purchased lot 130x178 ft. at N. E. cor. Belair Road and Mayfield Ave., for proposed theater building.

Miss., Jackson—Marcus Loew's, Inc., 1540 Broadway, New York, leased 2-story building on Capital St.; will remodel for motion-picture theater.

Mo., St. Joseph—Charwood Realty Co. receives bids this week for negro motion-picture theater at S. W. cor. Third and Francis Sts.; Webb Siemens, Archt., Bartlett Bldg.

Mo., St. Louis—Deutsches Haus Corp., Jeffla Hall, Jefferson & Lafayette Aves., planning to erect \$500,000 German Clubhouse and Theater at 2345 Lafayette Ave.

Tex., Coleman—B. C. Howell & Sons erect \$75,000 theater at 113 Pecan St.

Tex., Jacksonville—East Texas Theatres, Inc., J. C. Clemmons, Vice-Pres. & Gen. Mgr., Beaumont, has plans in progress by Emilie Well, Inc., Whitney Central Bank Bldg., New Orleans, La., for \$75,000, brick, concrete and steel, 50x130 ft. theatre building on Commerce St.

Warehouses

Md., Baltimore—School Board, William L. Rawls, Pres., Maryland Trust Bldg., has plans by William F. Stone, Munsey Bldg., for 3-story, \$50,000 building, Curtain and 20th Sts., for general storage, mechanical repair and equipment shop; Henry Adams, Mech. Engr., Calvert Building.

Okla., Medford—Van Sant Produce Co. planning to erect \$30,000 building.

Okla., Tulsa—Griffin-Goodner Grocery Co., 214 E. Cameron St., erect \$10,000, concrete and steel warehouse at 214 E. Cameron St.

Tex., San Antonio—Jack W. Neal, 207 Augusta St., has permit for \$20,000 warehouse on S. Laredo St.

City and County

Ark., Bentonville—Carthage Marble Corp., Carthage, Mo., has cut stone contract for \$185,000 Benton County Courthouse; rein. steel, Concrete Engineering Co., Kansas City, Mo.; struct. steel, St. Joseph Structural Steel Co., St. Joseph, Mo.; Albert O. Clark, Archt., Rogers; Messenger & Dalton, Contrs., Box 603, Pittsburg, Kan.

Ark., Blytheville—Southern Heating Co., Memphis, Tenn., has heating contract for \$85,000 city hall; electrical work, Wiggin Easley; plumbing, Pete The Plumber; dimension lumber, East Arkansas Lumber Co., all Blytheville; struct. steel, Banner Iron Works, 4560 Shaw St.; terra-cotta, Winkle Terra Cotta Co., Century Bldg., both St. Louis, Mo.; Uzzell S. Branson, Archt., Blytheville; Geo. H. Gassman Construction Co., Contr., Charleston, Mo.

Fla., Miami—City erecting 2 comfort stations, Bay Front Park; rein. concrete, 1 story, 22x36 ft., concrete floors, Class A built-up roof; cost \$12,000; H. H. Mundy, Archt., 212 N. E. Fifth St.; O'Neill-Orr Construction Co., Contrs., 212 N. E. Fourth St.; electrical work, Harrington Electric Co.; plumbing, Vlase & Company, 212 N. E. Fourth St.

Okla., Fairview—Cardwell Electric Co. has wiring contract for \$100,000 Major County courthouse and jail; Tonini & Bramblett, Archts., 416½ W. Main St., both Oklahoma City; D. C. Bass & Son, Contrs., Enid.

Okla., Muskogee—Consolidated Cut Stone Co., 1323 E. 5th St., Tulsa, has stone sub-contract for \$350,000 Muskogee County courthouse and jail; rein. steel, J. B. Klein Iron & Foundry Co., 1006 W. 2nd St., Oklahoma City; heating and plumbing, O'Connor Plumbing Co., 427 N. 4th St., Muskogee; Layton, Hicks & Forsyth, Archts., Braniff Bldg., Oklahoma City; H. O. Valour, Const. Archt., Manhattan Construction Co., Contr., both Manhattan Bldg., Muskogee.

Tex., El Paso—Elliott Engineering Co., Ray Bldg., has contract for \$6980 for heating plant at El Paso County courthouse; filing system, Hughes-Bule at \$395.

Tex., Hereford—City, E. S. Ireland, Mayor, let contract to Geo. Parr, 115 W. Sixth St., Amarillo, for \$25,000 city hall and fire station; semi-fireproof, brick, 2 stories.

Dwellings

Ala., Birmingham—A. J. Gray, care Jefferson Lumber Co., erect brick veneer residence; 2 stories, 37x53 ft., wood floors, tile roof, steam heat; day labor.

Ala., Birmingham—J. W. Johnson, care J. E. Salie, Archt., 2109 N. Fifth Ave., erect brick veneer residence, Redmont Park; 2 stories, 45x62 ft., wood floors, tile roof, steam heat; day labor.

Ark., Little Rock—Dr. R. N. Eubanks, 23 W. Icard St., erect \$15,000 residence, 601 N. Elm St.; hardwood floors, 2 baths, 2-car garage and servants' quarters; K. E. N. Cole, Contr., 4119 Lee St.

Ark., Fort Smith—Harry Warner, Merchants Natl. Bank Bldg., erect Colonial residence, Adelaide Ave.; cost about \$10,000, brick veneer; Chris Reichardt, Archt., First Natl. Bank Bldg.; Walter Vernon, Contr., 919½ Garrison Ave.

D. C., Washington—J. E. Fox, 1615 Buchanan St., putting up concrete block and brick cellar walls for 2 brick dwellings, 3819-21 Garfield St., N. W.; 2 stories, 20x42 ft., oak floors, slate and slag roofs; total cost \$20,000; plans and construction by owner; plumbing, Owens & Baur, 1312 Florida Ave., N. E.; brick work, C. H. Sorrell, 726 Fourteenth St., N. W.; millwork and steel, Barber & Ross, 11th and G Sts., N. W., all Washington; lumber, Silver Spring Building Supply Co., Silver Spring, Md. See Want Section—Building Materials and Equipment.

D. C., Washington—Wardman Construction Co., 1437 K St. N. W., erect 24 brick and tile dwellings, 6401-11 Eighth St., 6400-10 Seventh St. and 710-28 Tewksbury Place N. W.; 2 stories; total cost \$120,000; plans and construction by owner.

Fla., Jacksonville—Guy Marvin, 2550 St. Johns Ave., erect duplex; Carlos B. Schoeppl,

BUILDING CONTRACTS AWARDED

Association and Fraternal

Miss., Greenville—Young Men's Christian Assn. let contract to J. H. Ward for gymnasium, office and shower section of building, S. Theobald St.; L. W. Lathrop, Archt., Weinberg Bldg.

Okla., Ponca City—American Legion, Dept. of Oklahoma, 418 Capitol Bldg., Oklahoma City, H. T. Pettit, Dept. Adjt., having plans for \$100,000 American Legion Home School drawn by Forsyth Corp., Archts.-Builders, Ponca City.

Tex., Austin—Salvation Army, Capt. Damon Nichols, let contract at \$11,000 to Weise Bros. for \$17,000 building; brick veneer, steel partitions, composition roof, 2 stories, 40x60 ft., cement and wood floors, composition roof; Page Bros., Archts.-Engrs., Austin Natl. Bank Bldg.

Tex., Port Arthur—Union Art Mosaic Tile Co. has tile, terrazzo and marble contract for \$200,000 Masonic Temple; Wm. B. Ittner, Inc., Archt., 408 Board of Education Bldg., St. Louis, Mo.; Hickey & Harrington Construction Co., Contr., Bldrs. Exchange, San Antonio.

W. Va., Wheeling—Following have contracts in connection with \$400,000 Pythian Temple under construction: Darner Elevator Co., C. W. Williams, local representative; J. E. Moss Iron Works, 28th St.; H. E. Neumann Co., 1508 Market St.; Felsing Electric Co., 27 Tenth St.; structure to have 10 stores on first floor, lodge and clubrooms on second, 11 offices on third and probably cabaret and roof garden on fourth; Chas. W. Bates, Archt.-Engr., 77 Twelfth St.; J. R. Butts & Sons, Contrs., 1104 Chapline St.

Bank and Office

La., New Orleans—A. H. White Roofing Co., 3540 New Basin St., has composition roofing contract connection with Board of Trade remodeling work; roofing, A. H. White Roofing Co., 3540 New Basin St.; plumbing, A. G. Rose, 526 Loyola Ave.; electric wiring, "Irish" Levy Electric Co., 235 N. Peters St.; plastering, Geo. Davidson, 1674 N. Dupre St.; sheet metal work, American Sheet Metal Works, 3523 Gravier St.; hardware, Stauffer Eshle-mann & Co., Ltd., 511 Canal St.; lumber, Madison Lumber Co., 721 S. Claiborne Ave.; millwork, Reimann Manufacturing Co., 3109 Baudin St.; Gus Peterson, 730 Valence St.; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg.; J. A. Petty & Sons, Inc., Contrs., Godechaux Bldg.

Okla., Tulsa—Dan Hunt, Sr., Tulsa Mortgage Loan Bldg., owner; W. H. Horster, Contr., Exchange Bank Bldg.; 11-story addition to present 4-story structure. See Stores—Contracts Awarded.

Tenn., Memphis—Memphis Theater and Realty Co., owners; \$1,000,000 theater and office building; C. W. and Geo. L. Rapp, Archts., State Lake Bldg., Chicago; Kaiser-Ducett Co., Contrs., Joliet, Ill. See Theaters—Contracts Awarded.

Tex., San Antonio—Smith Brothers Properties, Inc., erect 31-story and basement office building, Bowens Island; fireproof; Atlee B. & Robt. M. Ayres, Archts., Bedell Bldg.; McKenzie Construction Co., Contr., Travis Bldg., advises plans not yet complete and sub-contracts not let, expect work to start about Jan. 1.

Churches

D. C., Washington—Following sub-contracts let for \$250,000 Fourth Presbyterian Church on which walls are about 3 feet above first floor sill level: Kalamien doors, E. H. Frederick Co.; millwork, Heise-Bruus Co., 600 S. Caroline St., both Baltimore, Md.; steel sash, Philadelphia Supplies Co., 1741 N. Sixth St., Philadelphia, Pa.; acoustical treatment, John H. Coller, 1832 Eighteenth St., N. W.; brick work, W. T. Eitman, 309 Quincy St.; damp proofing, Rose Bros., 2020 Georgia Ave.; electrical work, Biggs & Kirchner, Inc., 1730 Euclid St.; excavation, Bright-Shepherd Co., 1499 L St.; folding partitions, Taylor Folding Partition Co., 916 Fifteenth St.; composition floors, E. R. Fisher Co., Bond Bldg.; cork floor, Baker Cork & Tile Co., 1110 F St.; hardware, James B. Lambie Co., 1415 N. Y. Ave.; heating, Morris & Eagan, 304 Thirteenth St.; marble, tile and slate, Columbia Mosaic Tile Co., 114 C St.; metal ceilings, H. W. Mace, 618 Fifth St.; oil burning equipment, Oil Burner Equipment Co., 913 Maryland Ave., S. W.; orna. iron, John Koday, 1115 Ninth St.; painting, P. F. Gordon, 900 Butternut St.; plastering, Lee & Fitzpatrick, Kresge Bldg.; plumbing, R. E. Anderson, 901 Maryland Ave., N. E.; slag roofing, Warren-Ehret Co., 2625 K St.; slate roofing, Woodward Roofing Co., 1706 K St.; sheet metal work, Chris Gebicke, 3517 Thirteenth St.; struct. steel, Barber & Ross, Inc., 11th and G Sts.; steel erection, Summers Erecting Co., Box 353, Pennsylvania Ave. Station; stonework, McLeod Cut Stone Co., Eighth and Hamlin Sts., N. E.; toilet partitions, Sanymetal Products Co., 4316 Fifteenth St.; Appleton P. Clarke, Jr., Archt., 816 Fourteenth St., N. W.; Chas. H. Tompkins Co., Contr., 1612 Park Rd., N. W., all Washington.

D. C., Washington—Protestant Episcopal Cathedral Foundation, Rt. Rev. Jas. E. Freeman, Bishop of Washington, has started work on 4 piers rising from cathedral floor and eventually support central tower of \$10,000,000 cathedral under constr.; 17 ft. diameter, 63 ft. high, selected Indiana limestone; Frohman, Robb & Little, Archts., Washington Cathedral and Boston, 140 Bolston St., Mass.; Cram & Ferguson, Const. Archts., 248 Boylston, Boston; George A. Fuller Co., Contr., Washington and New York.

Fla., Jacksonville—First Evangelical Church erect \$20,000 building, Market St. near Ninth St.; tile and stucco, 2 stories; owner builds. Address L. F. Barta, 1715 Walnut St.

Mo., St. Louis—Bellefontaine M. E. Church let contract to McClinton Bros., 1340 Ferguson St., for brick addition, Bellefontaine Rd. near Shepley Rd.; 2 stories and basement, 30x68 ft., concrete foundation, asbestos shingle roof, steam heat; Manske & Bartling, Archts., 410 N. Euclid Ave.

Mo., St. Louis—Mount Calvary E. L. Church, 1449 Union Ave., erect \$60,000 building, Wells Ave. near Union; semi-fireproof, brick and rein. concrete, 2 stories and basement, 108x53 ft., maple floors, cut stone, steam or vapor heating; auditorium, gymnasium, classrooms, bowling alleys, etc.; Albert Meyer, Archt., 1021 Central Natl. Bank Bldg.; work by sub-contracts.

N. C., Lexington—Greer's Chapel M. P. Church, Rev. R. S. Troxler, Pastor, started work on \$10,000 building near Highway No. 10, 9 miles from Lexington.

Arch't., Consolidated Bldg.; Milburn Construction Co., 1 St. Johns Ave., Contr.

Fla., Jacksonville—Frank Boggs, 1646 Liberty St., erect 2-story brick veneer dwelling, Lewis St., near St. Johns St.; Campbell-Wheeler Co., Contr., 407 Barnett Bank Bldg.

Fla., Miami Beach—Emory Flinn erect 2 dwellings, 4512 Royal Palm Ave. and 4521 Sheridan Ave.; cost \$8000 each; J. E. Camassa, Contr.

Fla., Miami Beach—Southern Cross Construction Co., S. J. Hale, member, erect 5 dwellings, Isle of Normandy, in addition to 4 under construction; cost \$10,000 each; plans by Mr. Hale.

Fla., New Port Richey—Gene Sarazen, Fresh Meadow Country Club, Flushing, N. Y., let contract for \$20,000 residence, Jasmin Point, to H. A. Butler; Thos. Reed Martin, Arch't., both Sarasota, Fla. 8-25

Fla., Orlando—T. M. Otrich Co., 408 Par Ave., erect 5-, 6- and 7-room dwellings; 1 or 2 each month; plans and construction by owner. See Want Section—Building Material and Equipment.

Ky., Louisville—Fred Dolle, 2027 Barringer St., completed foundation for \$35,000 residence, Eastern Pkwy. and Castlewood St.; Allen Benedict, Arch't.-Contr., 2500 Broadmeade Rd.

La., New Orleans—Jos. A. Hardin, 833 N. Claiborne St., erect \$13,000 building, 3525 St. Anthony St.; O'Neil Labreand, Contr.

Md., Baltimore—Geo. R. Bassett, 1648 Pennsylvania Ave., erect \$10,000 residence and garage, 3803 Calloway Ave.; 2½ stories, 30x34 ft. and 20x20 ft., slate roofs, steam heat; Hugh Wilson, Arch't.; Younger & Riddle, Contrs., 4301 Miami Ave.

Md., Baltimore—B. Frank Bennett, 123 S. Howard St., erect 3 brick dwellings, Goodale Rd. near St. Albans Way, Paddington Rd. near Goodale, and Enfield and Paddington Rds.; 3 stories, 45x46 ft., 42x40 ft. and 40x46 ft., slate roofs, hot water heat; total cost \$42,000; Wm. Gordon Beecher, Arch't., 12 E. Pleasant St.; B. F. Bennett Building Co., Contr., 123 S. Howard St.

Md., Baltimore—Dr. Thos. B. Fletcher, 1129 N. Calvert St., erect \$28,000 hollow tile and stucco residence, Lambeth and Underwood Rds.; 2½ stories, 87x89 ft.; Mottu & White, Archts.; L. L. Chambers, Inc., Contr., 36th St. and Roland Ave.

Md., Baltimore—Otto Unger, 6 W. Franklin St., erect 6 frame dwellings and garages, 5212-16 Chetelet Ave.; 1 story, 25x38 ft. and 10x18 ft., vapor heat; total cost \$10,000; Unger & Gerland, 6 W. Franklin St., Archts.-Contrs.

Md., Baltimore—Dr. Albert Keldel erect \$22,000 residence, Greenway near Highfield Rd., Guilford; Mottu & White, Archts., 327 N. Charles St.; L. L. Chambers, Inc., Contr., 36th St. and Roland Ave.

Md., Baltimore—John B. Rogers, American Bldg., erect \$13,000 residence, 315 Thornhill Rd.; 2½ stories, 34x36 ft., slate roof, hot water heat; E. H. Glidden, Jr., Arch't., American Bldg.; Bell Concrete Construction Co., Contr., 802 E. Eager St.

Md., Baltimore—John Welsh, 11 E. Fayette St., erect 4 frame dwellings, 300-06 Evesham Rd.; 1½ stories, 24x28 ft.; total cost \$10,000; Geo. Wessel, Arch't., 601 W. 40th St.; owner builds.

Md., Baltimore—E. J. Gallagher Realty Co., Munsey Bldg., erect 34 brick dwellings, 3600 block Rexmoore Rd.; 2 stories; total cost \$150,000; owner builds.

Md., Baltimore—John H. Otto erect 3 block dwellings and garages, 3002-06 Glendale Ave.; 1½ stories, shingle roofs, hot water heat; total cost about \$10,000; E. O. Bauer, Arch't.; owner builds.

Md., Baltimore—Grace H. Turnbull erect \$18,000 residence and garage, 223 Chancery Rd.; 2 stories, 35x52 ft. and 15x20 ft., slate roofs, hot water heat; Bayard Turnbull, 328 N. Charles St., Arch't.; Sheppard Bros., Contrs., Woodlawn. 11-3

Md., Baltimore—John Welsh, 11 E. Fayette St., erect 4 frame dwellings, 3924 Fernhill and 301-11 Melrose Aves.; 1½ and 2 stories, 26x26 ft. and 24x29 ft.; total cost \$10,500; Geo. Wessel, Arch't., 601 W. 40th St.; owner builds; also erect 4 at 300-06 Evesham Rd.

Md., Baltimore—Cary R. Wilson erect \$18,000 brick residence, 225 Goodale Rd.; 2 stories, 52x40 ft., slate roof, hot water heat; Fredk. Thomas, Arch't., 726 E. 33rd St.; Major Engineering Co., Contr., Preston and Guilford Ave.

Md., Baltimore—Geo. A. Fisher, 1823 N. Caroline St., erect \$10,000 brick residence and garage, 515 St. George's Rd.; 2 stories, 36x26 ft., and 20x20 ft., slate roofs, steam heat; Fredk. Thomas, Arch't., 726 E. 33rd St., J. S. Downing, Contr., 2609 Greenmount Ave.

Md., Baltimore—Milburn Realty Co., 1320 N. Charles St., erect 2 dwellings, 11-15 Glen Ave.; frame and block, 2 stories, 30x33 ft. and 27x33 ft., slate roofs, hot water heat; total cost about \$10,000; Chas. T. McLane, Arch't.; owner builds.

Md., Baltimore—R. B. Construction Co., 2712 Reisterstown Rd., erect 23 brick dwellings, 4100 block Rollins Ave. and 3800 block Granada Ave.; 2 stories; total cost \$60,000; owner builds.

Md., Baltimore—Albert Keldel, Professional Bldg., erect \$22,000 brick residence, Greenway, near Highfield Rd.; 2½ stories, 35x73 ft., slate roof; Mottu & White, Archts., L. L. Chambers, Inc., Contr., 36th St. and Roland Ave.

Md., Baltimore—Peyton B. Strobel Co., 206 E. Lexington St., has contract for \$33,000 dwelling, Gittings Ave., Pinehurst; 10-rooms, 3 baths, stucco and stone; Harold Appleton Stillwell, Arch't.

Mo., Kansas City—Leo F. Brady, 6123 Kenwood St., erect 2 dwellings, 214-220 W. Dartmouth Rd.; frame, 2 stories, 41x30 ft. and 39x29 ft.; total cost \$10,000; owner builds.

Mo., Kansas City—Carl A. Brand, 907 Sharp Bldg., erect 2 brick dwellings, 32-36 W. Dartmouth Rd.; 2 stories, 22x30 ft.; total cost \$10,000; owner builds.

Mo., Kansas City—Alice G. Jackson, 611 Westover Rd., erect \$20,000 brick and stucco residence, 601 Westover; 2 stories, 48x37 ft.

Mo., Kirkwood, St. Louis—Old Orchard Heating Co., 633 E. Big Bend Rd., has hot water heating contract for \$15,000 residence for H. J. Smith; electrical work, F. H. Beeler, 5807 Highland St.; plumbing, C. F. Jacobs, St. Louis and Goodfellow Sts.; rockwood, Rockwood Corp., Times Bldg.; painting, H. R. Brindle, 4231 Peck St.; lumber and millwork, Clayton Lumber Co., Hanley Rd., Clayton; plans by owner; Grant Wyatt, Contr., 927 Century Bldg., St. Louis. 11-3

Mo., Springfield — J. W. Klingner, 1425 Washington St., erect \$12,000 residence, 1425 Washington Ave.; S. E. Dodds, Contr.

Mo., St. Louis—J. P. Fendler, 6007 S. Kingshighway, erect \$10,000 brick residence, 5611 Lisette Ave.; 1 story and basement, 30x40 ft., slate roof, hot water heat; owner builds.

Mo., St. Louis—Arthur T. Grindon, Arch't., 1198 Arcade Bldg., let contract to Berkley Construction Co., 6025 Delmar Blvd., for \$12,000 dwelling, Westmoor Park; 2 stories and basement, 37x40 ft.

Mo., St. Louis—Clifton Realty Co., Clifton and Southwest Sts., erect 3 brick dwellings, 6443-47-51 Southwest; 1 story, 25x36 ft., asphalt shingle roofs, hot air heat; total cost about \$10,000; Watson Construction Co., Archts.-Contrs., 1542 S. Theresa St.

Mo., St. Louis—J. A. Elnig, 42 Blakemore Place, erect 2 brick dwellings, 4641-43 Lee hot air heat; total cost \$10,000; owner St.; 1 story, 23x43 ft., asphalt shingle roofs, builds.

Mo., St. Louis—E. Schneider, 4953 Neosho St., erect brick residence, 4945 Neosho; 2 stories, 32x35 ft., composition shingle roof, hot water heat; cost about \$10,000; J. A. Schneider, Arch't.-Contr., 5452A Gravois St.

Mo., St. Louis—J. Kossmann, 3884 Wyoming St., has contract for \$10,000 brick and stucco dwelling, Grand Wood sub-division, St. Louis County; foundation completed; 1 story and basement, 34x43 ft., composition and tile roof; Clarence A. Koenig, Arch't., 2036A Russell Ave.; heating, Harry A. Helsel, 4600 Tennessee St.; plumbing, B. J. Becker Plumbing Co., 4220 Gravois St.; wiring, Vierheller Electric Co., 1111 Pine St.

Mo., St. Louis—F. Richardson, 4148 Russell Blvd., erect \$10,000 brick residence, 4984 Tholoan St.; 2 stories and basement, 22x41 ft., tar and gravel roof, hot water heat; B. A. Wilkie, Jr., Contr., 222 Rialto Bldg.

Mo., St. Louis—P. Sturmfels, Lexington St. and Kingshighway, erect \$16,000 residence, Moorlands; brick veneer, 2 stories and basement, 32x44 ft., oak floors, tile baths, concrete foundation, slate roof, hot water heat; Edw. Lantz, Arch't., 204 Wainwright Bldg.; owner builds.

Mo., St. Louis—Harry C. Vollmar, 6105 Simpson Ave., erect 8 dwellings, 2144-46-50-54-56-60-64-66 Knox Ave.; frame, 1 story and basement, 24x30 ft., asphalt shingle roof, hot air heat; total cost \$25,000; owner builds.

Mo., St. Louis—J. L. Wilson erect 3 brick dwellings, 5426-30 Loughborough Ave.; 1 story and basement, 27x30 ft., oak floors, tile roofs, tile baths, hot air heat; total cost \$15,000; owner builds.

Mo., University City, St. Louis—Harry F. Hays, 1062 Summit Ave., Webster Groves, erect \$20,000 residence, 7360 Kingsbury

Bldg.; brick, 2 stories and basement, 46x32 ft., oak floors, hot water heat, tile bath; Wm. W. Sabin, Arch't., 5818 Enright St.; T. J. McDaniel, Contr., Pacific, Mo.

Mo., University City, St. Louis—A. G. Pasquier, 311 N. Whittier St., erect 2 dwellings, 7048-52 Stanford St.; brick, 2 stories and basement, 27x28 ft., oak floors, tile roof and bath, hot water heat; total cost \$22,000; G. E. Ward & Son, Contrs., 4633 Vernon Ave.

N. C., Greensboro—Irving Park Co. erect \$16,000 dwelling, Wentworth Drive; 2 stories, 8 rooms, brick veneer, slate roof; R. H. Starr, Contr., 606 Courtland Ave.

Okla., El Reno—W. T. Aycock let contract to A. E. Skouby, Guthrie, for \$65,000 brick and stone residence; 2 stories, brick and concrete foundation, hardwood floors, oak and gum finish, wood shingles, misc. iron, furnace heat; Harry Reynolds, Arch't., Mercantile Bldg., Oklahoma City. 9-22

Okla., Muskogee—John Philpin, 1615 E. Broadway, and C. A. Robertson let contract to W. L. Green for 12 dwellings, 2500 blocks W. Okmulgee and W. Broadway; cost \$5000 and \$6000 each; work started on 2. 10-13

Okla., Oklahoma City—W. E. Bacon, Ponca City, started work on 2 dwellings, Crestwood.

Okla., Oklahoma City—J. Chapman, Bldr., 2915 W. North Place, reported, started work on 2 dwellings, Crestwood.

Okla., Oklahoma City—G. A. Hubbard, 611 W. 5th St., reported, started work on residence, Crestwood.

Okla., Oklahoma City—Mrs. Ada McFarland started work on residence, Crestwood.

Okla., Tulsa—Waldo T. Freeman, Bliss Bldg., Contr., erect dwelling, 1203 S. Norfolk Ave.; cost about \$10,000.

Tenn., Chattanooga—Selman O'Brien, 670 Georgia Ave., have contract for residence for Mr. Harrison.

Tenn., Memphis—W. W. Robinson, member, McCallum & Robinson, Mallory Ave., erect \$50,000 residence, Central and Buntyn Aves.; brick veneer, 12 rooms; Harker & Cairns, Archts., 1238 Court St.; Joe Smith, Contr.

Tenn., Memphis—South, Whitten & Haley, First Natl. Bank Bldg., erect 4 dwellings, 736 Maury St., 849 N. Willet St., Autumn Ave. near Evergreen St., Stonewall St. and N. Garland St.; total cost \$44,300; work started on two.

Tenn., Memphis—J. T. Webb, 732 Washington St., erect \$12,500 English type residence, Linden Ave., Kimbrough subdivision; South, Whitten & Haley, Contrs., First Natl. Bank Bldg.

Tenn., Memphis—S. B. Schwartz, Sr., erect 11 frame dwellings and garages, 1561-57-73-79-85-89-95, 1601-05-11-17 Glenview St.; cost \$3000 each; Sam Etingott, Contr., 565 Mississippi St.

Tenn., Memphis—Dr. R. L. Sanders, 20 S. Dunlap St., erect \$25,000 brick veneer residence, 60 Bellair Drive; 2 stories and basement, 73x43 ft., oak floors, tile roof, sun parlor and baths, 10 rooms, Sieg & McDaniel, Archts., First Natl. Bank Bldg.; W. C. Owen & Co., Contrs., Dermon Bldg.

Tenn., Memphis—W. E. White, Fidelity Bank Bldg., erect brick veneer residence, W. Chickasaw Pkwy.; 1 story and basement, oak floors, composition roof, steam heat; Polk W. Agee, Arch't., 1315 Fidelity Bank Bldg.; owner builds.

Tenn., Nashville—A. W. Neal erect 2 brick veneer dwellings, 917-19 Walkirk Ave.; cost \$8000 each; composition shingle roof, hot air heat, rein. concrete footings and foundation; owner builds.

Tex., Beaumont—C. A. Walden, 526 Elizabeth St., erect \$35,000 residence; Georgian type, 2 stories; Jos. C. Beck, 1050 Ave. C., Arch't.; T. J. Posey, Contr., 887 Corley St.

Tex., Houston—H. H. Darby, 210 E. 26th St., started work on 2 brick veneer duplexes, 2116 Berry and 2115 MacGregor Sts.; 2 stories, 12 rooms, cost \$9500 each; Marine Construction Co., Contr.

Tex., Houston—Claiborne McCauley erect \$12,000 residence, 2502 Riverside Drive, Riverside Terrace; 2 stories, 6 rooms and bath, brick veneer; Russell Brown Co., Contr., 3104 Main St.

Tex., New Braunfels—August Borman started work on residence.

Tex., San Antonio—Allen F. Barnes, Bushnell Apts., erect \$12,500 brick and stucco residence, 107 E. Grammercy Place; 2 stories; Carvel & Co., Contrs., Frost Bldg.

Tex., San Antonio—H. Faber, 701 Hunstock Ave., erect \$10,000 residence, 143 E. Lullwood Blvd.; frame and stucco, 2 stories; Carvel & Co., Contrs., Frost Bldg.

Tex., San Antonio—C. M. Furr, 201 Furr Drive, started work on \$16,000 residence; English type, 6 rooms, 2 baths.

Tex., San Antonio—C. A. Zilker, 529 W. Ashby Place, remodel residence; Atlee B. & Robt. M. Ayres, Archts., Bedell Bldg.; R. C. Shane, Bidra. Exchange, contract on cost plus basis.

Tex., San Antonio—Willson & Hugman, Archts., drew plans for \$30,000 dwelling, E. Rosewood Ave., Oakmont; Spanish type, 2 stories, 2 baths; work started.

Tex., San Antonio—R. L. Wirtz, 139 Magnolia Drive, erect English type residence, Olmos Park Estates; 2 stories, concrete foundation, field stone, half timber and stucco; Kelwood Co., Archt., Travis Bldg.; U. H. Wagner, Contr., 101 Pecan St.

Tex., Sherman—Joe F. Etter let contract for \$40,000 residence, Hopson and Belden Sts., to Walter Whatley, Dallas; pink stucco, mottled tile roof, hardwood floors and finish, tile terrace, garage; Thomson & Swaine, Archts., Constr. Industries Bldg., Dallas.

Va., Richmond—Houses Investment Corp. started work on 14 brick dwellings, Parkwood Ave. near Colonial Ave.; 8 rooms, hardwood floors, tile baths, showers, electrical refrigeration, automatic hot water heaters; total cost \$125,000.

Government and State

Mo., Camp Meade—Constructing Quartermaster let contract at \$370,000 to Palmer-Spivey Construction Co., P. O. Box 303, Charlotte, N. C., for 3 barrack buildings, Camp Meade; accommodate 600 enlisted men; Colonial type, 3 stories each, concrete floors, slate roofs; plans by Q. M. Dept., Washington; heating and electrical work not let. See Want Section—Building Material and Equipment.

Tex., Corsicana—State Board of Control, Dr. H. H. Harrington, Chmn., Austin, let contract to Bailey, Burns & Fitzpatrick, 602 Mercantile Bank Bldg., Dallas, for remodeling boys' dormitory at \$26,100, remodeling and repairs to girls' dormitory at \$12,950, and miscellaneous repairs at \$1700, State Orphans' Home; bids rejected for enlarging and remodeling administration bldg., etc.; Arthur A. Brown, Archt., 509 Mercantile Bank Bldg., Dallas.

Hospitals, Sanitariums, Etc.

Ark., Hot Springs National Park—Dr. H. King Wade, Dugan-Stuart Bldg., let contract at \$72,000 to J. D. Johnson, 726 East St., for clinic and store building, Central Ave.; rein. concrete, 3 stories, 40x96 ft., cement, tile and terrazzo floors, concrete foundation, composition roof; Thompson, Sanders & Ginoecchio, Archts., Hall Bldg.; Garver & Merrone, Engrs., Gazette Bldg., both Little Rock. See Want Section—Building Material and Equipment.

Ark., Newport—Dr. A. M. Elton let contract to A. R. Anderson, Newport, to remodel Elks Bldg. for hospital; cost \$40,000; Frank W. Gibbs & Co., Archts., Gazette Bldg., Little Rock; plumbing and heating, H. Claxson, Newport.

D. C., Washington—Following have sub-contracts in connection with \$1,500,000 alterations and additions to Walter Reed General Hospital, Army Medical Center: American Mosaic Co., 9127 Eye St. N. W.; Electrical Contracting Co., care Walter Reed Hospital; S. E. Smith, Seventh and Franklin Sts.; Warren Ehret Co., 262 K St.; Lake Stone Co., 3233 K St. N. W., all Washington; Art Metal Construction Co., Jamestown, N. Y.; Colonial Brick Co., Winchester, Va.; W. E. Cotton Co., Harford and Lamont Aves.; Ed C. Fleck Co., 102 E. Lombard St., both Baltimore, Md.; Egnal & Verin, Christman Bldg., South Bend, Ind.; Ev-Air-Tight Co., 1516 Summer St.; Harold McCalla Co., Beach St. and E. Columbia Ave., both Philadelphia, Pa.; Hamilton Glass Co., 811 Strauss Bldg.; Sykes Co., 2300 W. 58th St.; W. P. Nelson Co., 614 S. Michigan Ave.; Otis Elevator Co., 600 W. Jackson Blvd., all Chicago, Ill.; H. W. Roos Co., 2036 Dana Ave., Cincinnati, O.; Smith & Kline, Rosslyn, Va.; Fleisher Engineering & Construction Co., Contra., 410 N. Michigan Blvd., Chicago.

Ga., Brunswick—City voted \$200,000 bonds, including \$75,000 for hospital annex; Daniell & Beutell, Archts., 207-09 Healey Bldg., Atlanta.

Mo., St. Louis—Vickery Bricklaying Co. has brick work contract in connection with tornado repairs to Mullanphy Hospital; roofing, C. Young; sheet metal, Hyde Heating and Sheet Metal Works; plastering, J. W. Rowan; repairs to plumbing, heating, wiring, painting, mechanical equipment and elevator repairs awarded by G. E. Quick, 5354 Minerva Ave.

Mo., Wellston, St. Louis—Following sub-contracts let on \$100,000 kitchen and service

addition to St. Vincent's Sanatorium: Steel windows, Richey, Browne & Donald, Maspeth, N. Y.; terrazzo, Art Mosaic & Tile Co., 216 Sycamore St., Toledo, O.; laundry chute, Metal-Vitrix Co., Chicago, Ill.; brick work, Vickery Bricklaying Co., 1031 Commodore Drive; cut stone, St. Louis Contracting Co., 4417 Clayton St.; sheet metal, Hyde Heating and Sheet Metal Works, 4854 Page St.; mill-work, Huttig Sash and Door Co., 1200 S. Vandeventer St.; plastering, John W. Rowan Plastering Co., 411 N. Seventh St.; tile work, W. J. McGarry Co., Rialto Theater Bldg.; orna. iron, LaSalle Iron Works, 3110 LaSalle St.; glass and glazing, Condie-Bray Glass Co., 2500 N. Broadway, all St. Louis; structure concrete and brick, 2 stories and basement, 53x121 ft., terrazzo and tile floors, 20-yr. roof; address proposals on furnishings, equipment, etc., \$50,000, to Mr. Quick; O'Meara & Hills, Archts.; G. E. Quick, Supvg. Engr., 5354 Minerva Ave.; Cornet-Casey Co., Inc., Contr., Chemical Bldg., all St. Louis; first floor poured; heating, electrical work, plumbing, elevators, dumb waiters, painting, finish hardware and refrigerators to be let direct by Mr. Quick.

S. C., Greenville—City let contract to Charley Kloeckler, Walker Bldg., for \$25,000 nurses' home at City Hospital; heating, L. L. Barr; accommodate 75; Wm. R. Ward, Archt., Walker Bldg.

Tex., Abilene—Abilene State Hospital erect \$25,000 fireproof building for offices and apartments; brick, stone and rein. concrete, 2 stories, 42x58 ft., concrete foundation, composition roof; David S. Castle Co., Archt.; Suggs & Dunlap, Contrs.

Hotel and Apartments

Ala., Mobile—Cawthon Hotel, Frank J. Jackson, Mgr., let contract to Jett-Quill Construction Co., Bank of Mobile Bldg., to dismantle Vineyard, barroom, clubrooms and kitchen on seventh floor and erect 41 guest rooms in their stead; \$50,000; furnishings cost \$25,000; equipment for dining room and kitchen cost \$25,000.

Ark., Fayetteville—Washington Hotel let contract to E. V. Bird Construction Co. for remodeling and enlargement.

Ark., Fayetteville—Mrs. Jay Filbright, owner of Washington Hotel, let contract to Earl Bird for improving and enlarging; J. Warren Teasdale, Archt., St. Louis, Mo.

Fla., Clermont—C. B. White and Harry Whyel, Uniontown, Pa., let contract to C. E. Tabor for 32-room addition and remodeling Lake Highlands Club int 50-room hotel.

Fla., Jacksonville—Charles Grimwood, 37 W. Church St., erect \$12,000, 2-story, frame, 4-apartment house, Liberty between 10th and 11th Sts.

Fla., Jacksonville—Miss Martha Issac, 13 Aberdeen Court, erect \$17,500, 2-story, brick veneer, 36x56-ft. apartment house at 3714-16 St. John Ave.; hardwood (oak) floors, concrete and brick foundation, asbestos roof; heating and plumbing to T. H. Thompson, 526 W. Adams St.; electric work, Howard P. Foley Co.; plastering, Brown Brothers, 335 Stockton St.; plans and construction by Herbert Parrish, 314-15 Duval Bldg.

Fla., Jacksonville—T. F. Johnson, 2798 Downing St., let contract to J. P. Caso, 2225 Fitzgerald St., for \$16,000, 2-story, brick veneer, 4-apartment house on Downing St.

Ga., Waycross—Waycross Community Hotel Corp., reported, let contract to T. A. Monk, Bradenton, Fla., for 7-story and basement, 110-room hotel, Elizabeth and Tebeau Sts.; stores and shops on ground floor; turnkey contract. Contr. to install lighting, heating, etc.; leased to J. R. Waddill of Albany, who will provide all furnishings and equipment; Wallin & Comer, Archts., Realty Bldg., Savannah.

La., Baton Rouge—Wogan & Bernard, Archts., Title-Guarantee Bldg., New Orleans, let contract to I. W. Eaton, for \$30,000, 8-apartment building and \$8000, 2-story, duplex building for Don B. Hearlin; pressed brick, tile roofs.

Md., Baltimore—M. A. Long Co., Contrs., 10 W. Chase St., will erect 12-story, fireproof, brick, 50x123 ft., 104-apartment building at N. E. corner St. Paul and Eager Sts.; represent \$800,000 for land, building and equipment; units range from 1 room and bath to 6 rooms and bath; dining room in basement to seat 100; financed through Title Guarantee and Trust Co.; Frederic A. Fletcher, 13 W. Franklin St., Archt.

Mo., St. Louis—L. Grossberg, 510 Central Natl. Bank, erect \$20,000, 3-story brick tenement at 4170 Enright St.; composition roof, hot water heat; P. Rollhaus, Archt., 620 Central Natl. Bank; owner builds.

Mo., St. Louis—V. A. Chinberg, 808 Chestnut St., taking bids on all sub-contracts for

\$150,000, 4-story, 94x134-ft., brick, reinforced concrete and terra cotta, 36-unit efficiency apartment building, Delmar and Clara Aves.; concrete foundation and floor slabs, stone trim, oak and tile floors, elevator; include 19-car garage on ground floor; Nolte & Numan, Archts., 614 Fullerton Bldg.; owner builds.

Mo., St. Louis—Mars Realty Co., 209 International Life Bldg., let contract to H. H. Sims, 5508 Natural Bridge, for two 3-story, 50x54-ft. brick tenements, 5532-40 Natural Bridge; \$32,000; composition roofs, steam heat; O. Popp, Archt., Arcade Bldg.

Mo., St. Louis—Leo K. Milberger, Archt.-Owner, 5212 Murdoch St., erecting \$40,000, 2-story and basement, brick, 36x113-ft., 10-unit apartment building at 2902 Miami and 3603-9 Nebraska Sts.; plumbing to Fink Plumbing Co., 4301 Grace Ave.; electric wiring, Mack Electric Co., 4437 Wilcox St.; structural iron, Kaysing Iron Works, 1025 N. 25th St.; roofing, Southside Roofing Co., 4212 Gravois St.; painting, F. K. Jacobus, 3537 Delor St.; plastering, A. Niebuhr, 4605 Stef-fens St.; Frank C. Slipp, Contr., 5142 Rosa St.

Mo., St. Louis—Harry Spector purchased property on Waterman Ave. near Skinker Road; Jacob Rubin & Sons, Builders, 904 Chestnut, will erect \$300,000, 3-story, 48-family apartment building to be known as "Skinker Apartments." Builders wire: "Contracts not awarded, plans in making."

Mo., St. Louis—Mr. Telthorst, 4209 Carter St., let contract to E. Schroeder, 46 Racquet Drive, for \$10,000, 34x45-ft., 2-story, brick tenement, 4209 Carter St.; tar and gravel roof, steam heat; J. Tarling, Archt., Grand and St. Louis Sts.

Mo., St. Louis—I. Weinberg let contract to Weinberg Construction Co., both 816 Chestnut St., for \$30,000, 3-story, 74x60-ft. brick stores and tenement, 2912-18 Union St.; composition roof, steam heat; M. L. Latner, Archt., 816 Chestnut St.

Mo., St. Louis—S. Alexander, 4304 Lindell Blvd., let contract to W. H. & N. Culliff Co., 410 N. Euclid Ave., alter 3-story hotel at 4304-8 Lindell Blvd.

N. C., Charlotte—Southeastern Construction Co., 210 W. Second St., has permit for \$20,000, 2-story, 32-room apartment house at N. W. cor. E. Fifth St. and Clement Ave. for Van Ness, Brenizer & Van Ness; also \$14,000, 2-story, 16-room apartment house at Park Drive and Clement Ave. for same owners.

Okla., Tulsa—Frank L. Townsend, 1434 S. Denver St., erect \$68,000, 3-story, brick, 45x142-ft. 18-apartment building at 12th and S. Denver Sts.; cement foundation, wood floors, composition roof; plans and construction by T. Dahlstrom, Cole Bldg. See Want Section—Building Materials and Equipment.

Tex., Gainesville—Electric Shop, Denton, received contract for wiring and fixtures at \$6248 in \$250,000 Turner Hotel under construction by Bellows-Macley Construction Co., Kirby Bldg., Dallas.

Tex., San Antonio—Fred E. Webster, 506 Builders Exchange Bldg., erect 2-story, English Gothic type, 8-apartment house, 1600 block W. Kingshighway; Chesley N. Wood, Archt., 415 Dewey Place; owner builds; all sub-bids by invitation.

Tex., San Antonio—Gilbert Bailey, 327 University Ave. let contract to E. S. Kaler & Co., Travis Bldg., for \$10,000, 2-story, frame apartment building, 803 Summit St.

Tex., San Antonio—Mrs. Elizabeth Warren, 1309 S. Flores St., let contract to C. C. Dishman, 305 Mary St., for \$12,000, 2-story, brick veneer apartment house at 1309 S. Flores St.

W. Va., Clarksburg—Stonewall Jackson Hotel Co., Harry E. Pope, Pres., let contract to Ramsey & Catlin Construction Co., Ashland, Ky., for \$350,000 structure; present 2-story Prunty Bldg. at Third St. and Murdock Alley, to be transformed to form base of 10-story hotel; Charles L. Hickman, 329 S. Second St., Clarksburg, and A. F. Wy-song, Professional Bldg., Charleston, Archts.

Miscellaneous

Ala., Birmingham—Birmingham-Alabama Realty Co., Inc., Exchange Bldg., John P. Shaddick, Pres., plans developing Mason-Dixon City, to include clubhouse, motion picture studio, theater, 18-hole golf course, etc.; Turner & McPherson, Archts., American Trust Bldg.; Jerry Gwin, Contr., Age-Herald Bldg.; R. M. Stewart, Constr. Engr. See Land Development.

Fla., Daytona Beach—E. L. King erect \$40,000 clubhouse at golf course; W. D. Harper & Co., Archts., Daytona Beach and Florence, S. C.; T. K. Apgar, N. Peninsula Dr., Seabreeze, Contr.

La., Bastrop—Goodwin & Blane, Contrs., erecting \$10,000, 1-story, frame and stucco, 42x64-ft. Funeral Home, Vine and Pine Sts.; brick foundation, hardwood floors, Johns-Manville roof; electric work to Haggetty & Lawrence, Madison St.; plumbing, Botkins & Son; roofing, Dixie Roofing Co., 119 N. Grand St., Monroe; plastering and stucco, Murphy & Chavis; hardware, Bastrop Hardware & Furniture Co.; J. W. Smith & Associates, Archts., Ouachita Bank Bldg., Monroe; A. C. Volk, Engr. See Want Section—Building Materials and Equipment. 11-3

Mo., Kansas City—George H. Long, Undertaker, Kansas City, Kansas, started work on \$40,000, 2-story and basement building at N. E. cor. Tenth St. and Barnett Ave.; E. Drier & Son, Contrs., Peoples National Bank Bldg. 11-3

Railway Stations, Sheds, Etc.

Ga., Thomaston—Central of Georgia Railway, C. E. Weaver, Ch. Engr., Savannah, let contract to Williams Lumber Co., Thirteenth St., Columbus, for 1-story, 226x50 ft., brick passenger and freight station; concrete and wood floors, composition roof. 1-28-26

Texas—Texas & New Orleans R. R. Co., R. W. Barnes, Ch. Engr., Southern Pacific Lines, 916 Southern Pacific Bldg., Houston, let contract to Homer L. Fitch, Brownsville, for stations, platforms, section and tool houses, etc., between Harlingen and Brownsville; concrete, frame and stucco construction, concrete foundations, concrete and wood floors, rigid asbestos shingle roofing. 11-3

Tex., Sugarland—Galveston, Harrisburg and San Antonio R. R., care R. W. Barnes, Ch. Engr., 916 Southern Pacific Bldg., Houston, started work on concrete, frame and stucco, 20x143-ft. passenger and freight station; concrete floors and foundation, rigid asbestos shingle roof; Irving J. Shapley, Contr., 1108 Fairview St., Houston. 10-13

Schools

Fla., St. Augustine—St. Johns County Board of Public Instruction let following contracts: Four-room addition to West St. Augustine grammar school, Grahn Construction Co., 133½ Magnolia Ave., Daytona Beach, \$15,460; 8 rooms at Hastings high school, Eau Gallie Construction Co., Eau Gallie, \$28,456; 10-room building to replace colored school No. 8 at Hastings, R. W. Wood, \$14,135; 4-room addition to Central Ave. colored school, A. F. Perry, Jr., 214 Avondale Ave., Jacksonville, \$14,980; Fred A. Hendrick, Archt., Jefferson Bldg. 10-6

Ga., Athens—State College of Agriculture, Dr. Andrew M. Soule, Pres., has plans in progress by Prof. S. P. Lyle, Engineering Dept., for \$100,000, 2-story and basement, brick wing to Girls' Dormitory; contain gymnasium, laboratories, etc.; install \$35,000 power plant; work by owners under direction of Prof. Lyle; call for estimates on materials in 2 weeks.

Ga., Stockton—School Board erecting \$15,000, 1-story, brick and tile, stucco, 128x65-ft. consolidated school; rift pine floors, cement foundation, built-up asphalt roof, equipment and furnishings cost \$3000; Greer & Biggers, Archts., Valdosta; Fred Vining, Engr., Harper Contracting Co., Contrs., Homerville. See Want Section—Building Materials and Equipment. 10-20

Miss., Clumbus—Lowndes County Board of Education let contract to Badger & Badger for \$25,000 Caledonia Consolidated School.

Miss., Pascagoula—Board of School Trustees let contract to A. Ziegenfelder, Gulfport, at \$13,583 for 1-story, brick and frame, 4-classroom addition to High School; plumbing and heating to Alonzo B. Hayden, Inc., at \$1800; composition roof, plastered interior; Martin Shepard, Archt., Balter Bldg., New Orleans. 10-27

Mo., Webster Groves (Ind. Br. St. Louis)—Webster College, Lockwood and Plymouth Sts., erecting 5-story and basement, brick and reinforced concrete, 190x128-ft., T-shaped Girls' Dormitory; plumbing to McNamara Plumbing Co., 6236 Delmar Blvd.; heating, Elliott & Barry Engineering Co., 4000 W. Pine Blvd.; electric wiring, A. L. Brod, 3610 N. 14th St.; Henry P. Hess, Archt., 100 Ambassador Bldg.; Gillespie & Daly, Contrs., 714 International Life Bldg.

N. C., Charlotte—Board of Education, W. R. Foreman, Chmn. Finance Committee, erecting 11x30-ft. addition to Piedmont Junior High School; provide shower, baths and lockers.

Okla., Langston—State Board of Affairs, G. C. Wollard, Chmn., let contract to Hamon & Mattison, both Oklahoma City, at \$77,869 for new building.

Okla., Tulsa—Board of Education, Dr. P.

O. Claxton, Supt. of Schools, let contract to W. R. Grimshaw, Kennedy Bldg., at \$57,500, for Edison school; Hughes, Mitchell & Quinn, Robinson Bldg., receive contract at \$34,900 for 4-room school at 36th St. and S. Rockford Ave.; addition to Booker T. Washington negro school to R. M. Gillilan, 1418 E. 6th St., \$20,000.

Tenn., Lexington—Board of Education let construction and electrical work contract to Foust & Womble, Greenfield, at \$44,790, for High School building; heating and plumbing to J. C. Jowers; R. A. Heavenner, Archt., Jackson. 9-15

Tex., Waxahachie—Trinity University, W. D. Anderson, Chmn. Building Committee, let contract to Ramsey Brothers, at \$37,000, for 2-story, brick and steel, 90x110-ft. gymnasium; concrete and maple floors, composition roof; equipment and furnishings cost \$5000; R. H. Hunt Co., Archt., 1407 S. W. Life Bldg., Dallas. 10-27

W. Va., Farmington—Marion County Board of Education, Edward E. Hale, Supt., Fairmont, let contract to L. A. and Leonard Riley, Shinnston, for brick and steel addition to High School, house auditorium and gymnasium. 8-4

Stores

Ark., Camden—Earl L. Stafford, Contr., razing frame building of J. L. Galyon on S. California St. to replace with semi-fireproof structure; Monolithic concrete walls, steel reinforcements, plate glass front; concrete work by A. G. Trude.

Ark., McGehee—J. S. Dessent erect 3 store buildings on Railroad St.; construction of concrete tile blocks, product of Arkansas Concrete Products Co., Arkansas City.

D. C., Washington—H. Abramson, Inc., Seventh and L Sts. N. W., erecting \$35,000, 2-story, brick and concrete store and office building, 13th and H Sts. N. W.; Appleton P. Clark, Jr., 816 Fourteenth St. N. W., Archt.; James L. Parsons, Jr., Contr., Lenox Bldg.

D. C., Washington—Wardman Construction Co., Inc., 1437 K St. N. W., completed foundations for 8-story, reinforced concrete frame, 21x120-ft. furniture store at 425 Seventh St. N. W.; slag roof, concrete foundation; steam heating to Burrows & Donovan; plumbing, T. O. May, 1029 Park Rd. N. W.; electric work, E. C. Ernst, 1634 Fourteenth St. N. W.; 1 passenger elevator; plans and construction by owners.

Ga., Atlanta—Massell Realty Co., 15 Poplar St., erect \$25,000, brick building on Houston St.; built-up roof, wood and concrete floors, L-shaped; E. C. Seiz, 43½ Peachtree St., Archt.; owners build.

La., New Orleans—J. B. Levert Land Co., 423 Carondelet St., let contract to J. A. Haase, Jr., for \$17,400, 1-story, brick store building on St. Charles Ave.; composition roof; Andry & Fettel, Carondelet Bldg., Archts.

Miss., Jackson—N. W. Overstreet, Archt., let contract to F. W. Kabbes, for \$30,000, 2-story, 76x120 ft., brick store building for W. P. Bridges; offices on second floor, concrete foundation, composition roof, plate glass windows on marble base.

Miss., McComb—J. C. Blair let contract to August Wennerland for brick building on Canal St.; 2 stories, 25x75 ft.

Miss., Tupelo—H. C. McNutt started work on first of 3 store buildings planned for W. Troy St.

Mo., Kansas City—J. H. White, Lee Bldg., let contract to O. O. Concannon, for \$12,000, 2-story, brick, 75x115-ft. business building at 1514-16 Walnut St.

Mo., St. Louis—W. Duerbeck, 2300 Benton St., let contract to Jones Bros. Construction Co., 5549 Wells St., for \$12,000, 2-story, 43x47-ft. store and tenement, 3970-4 Finney St.; tar and gravel roof; Gerhard Becker, Archt., Ferguson, Mo.

Mo., St. Louis—Francis Bros. Dry Goods Co., 5005 Gravois St., let contract to Martin Stamm, 5529 Millets St., for \$35,000, 2-story and basement, 50x80-ft. store and apartment building at 3809-17 S. Kingshighway; hot water heat, composition roof, metal store fronts, plate glass, oak floors; private plans. 11-3

Mo., St. Louis—O. Glebe, 5331 Kingshighway N. W., let contract to Henry Hinrichs, Jr., 1008 Loughborough St., for \$15,000, 2-story and basement, brick store and apartment building, 5331 Kingshighway; hot water heat, tar and gravel roof, plate glass, oak floors, tile baths; private plans.

Mo., St. Louis—H. W. Simon, 4569 Athlone Ave., erecting \$15,000, 2-story and basement, 25x70-ft. brick store and office building, New-

stead st.; Julius Tarling, Archt., 2806 N. Grand Blvd.

Mo., St. Louis—A. E. Blumer, 1105 Chestnut St., let contract to M. D. Garrison, 1105 Chestnut St., for \$25,000, 2-story, brick, 100x35-ft. store building, 5206 Natural Bridge; concrete roof, steam heat; Duncan & Garrison, Archts., 1105 Chestnut St.

Mo., St. Louis—Union Realty & Construction Co., 5500 Easton St., erect \$12,000, 2-story, 38x50 ft., brick store and tenement, 3339-41 Clara St.; composition tar and gravel roof, steam heat; F. D. Lerner, Archt., 5500 Easton St.

Okla., Tulsa—W. H. Horster, Exchange Bank Bldg., has general contract on cost plus basis for \$650,000, 11-story, steel and terra cotta, 100x95-ft. addition to present 4-story structure at Fourth and Main Sts., occupied by Brown-Dunkin Dry Goods Co., 401 S. Main St.; Dan Hunt, Sr., Tulsa Mortgage Loan Bldg., owner; George Winkler, Archt., Tampa, Fla.; Southwest Engineering Co., Engr.; concrete joist and slab flooring, composition roofing; Kansas City Structural Steel Co., Mid-Continent Bldg., has contract for structural steel; terra cotta to Northwestern Terra Cotta Co., 2525 Clayborn Ave., Chicago, Ill. 10-20

Tex., Abilene—J. M. Radford let contract for \$37,000 brick building.

Tex., Beaumont—E. L. Wilson Hardware Co., John L. Keith, Pres., 353 Pearl St., let contract to McDaniel Brothers for \$200,000, 2-story and mezzanine, steel, concrete and brick building on Pearl St.; F. W. and D. E. Steinman, Archts., 650 Mariposa St.

Tex., Dallas—Neiman-Marcus Co., Main and Ervay Sts., Herbert Marcus, Pres., let contract to Watson Co., 1927 S. Akard St., for addition to store, Main, Ervay and Commerce Sts.; cost \$100,000, including equipment; 3 stories, terra cotta front, 25x100 ft.; Herbert M. Greene Co., Archts., Santa Fe Bldg.; also remodel 2-story, brick and terra cotta building at 1607 Commerce St., \$20,000. 11-3

Tex., Dallas—F. J. Woerner & Co., Archts., Central Bank Bldg., supervising construction of 126x80 ft. building, Jackson St., between Harwood and St. Paul Sts., to be occupied by Moore Bros. Electric Co., 1916 Young St.

Tex., Houston—Lightfoot Construction Co., 3103 Main St., announced additions, costing \$20,000 to 1-story, stucco community store building, to be built by Scott Shambaugh, 1401 W. Alabama St., on Dunlavy St.

Tex., Kerrville—Mrs. George Morris let contract to Wright & McKinzie at \$21,000 for 1-story, brick and tile, 48x90-ft. store building; J. C. Penny Co., lessee.

Tex., McAllen—A. M. Lngoria, Contr., erecting 1-story building on Main St., leased by Hays-Sammons Hardware Co. of Mission.

Tex., Midland—John Scharbauer let contract to A. Fellows for \$12,000, 2-story, brick, 34x90-ft. mercantile and office building; Edw. A. Nolen & Sons, Archts., Midland.

Tex., Midland—T. S. Hogan let contract to A. Fellows for \$10,000, 2-story, concrete and stucco, Spanish design building; Edward A. Noien & Sons, Archts.

Tex., Plainview—Security State Bank erecting \$12,000, 2-story store and office addition; Harrison & Smyth, Contrs.

Tex., San Angelo—Curtis Deason let contract to Reese & Son for \$12,480 brick and tile business building on W. Beauregard Ave.; brick walls, Spanish tile roof; Morgan & Korn, Archts., Dallas and San Angelo. 9-22

Va., Roanoke—Oak Hall—M. Rosenberg & Sons, Inc., 21 Campbell Ave., building new front and remodeling building at Campbell Ave. and Jefferson St.; \$30,000; Frye & Stone, Archts.; T. J. Davis Construction Co., Contr.

Theaters

La., Hammond—A. Higginbotham & Associates, 969 Louisiana Ave., Baton Rouge, let contract to G. L. Whitaker, Tylertown, Miss., at \$63,900 for 3-story, brick, concrete, steel, ornamental stone trim theater building; reinforced concrete foundation, composition roof, tile, wood and concrete floors; equipment and furnishings cost \$20,000; low pressure steam heating and plumbing to H. A. Cabirac, 4717 Baronne St., New Orleans, at \$5948; Wm. T. Nolan, Archt., Canal-Commercial Bldg., New Orleans. 10-13

Miss., Tupelo—Moore & Gregory let contract to Standard Construction Co. for \$200,000 building; contain 7 stores, 18 offices and theater to seat 1500 people; Hubert T. McGee, Archt., Fidelity Bank Bldg., Memphis, Tenn. 8-25

Mo., Kansas City—Warren C. Gumm, 3300 Virginia, planning early construction of the-

ater and hotel building at Armour Blvd. and Main St.; theater seat 5000, hotel to be 3 stories, 640 rooms.

N. C., Greensboro—Publix-Saenger Theaters Corp., operators of National Theater, started renovating and refurnishing.

Okl., Enid—Grant M. Buxton, Owner-Contr., erecting \$75,000, 3-story, 50x150-ft. theater building, W. Randolph St.; seat 1200; address equipment proposals to Griffith Amusement Co., 412 W. Reno St., Oklahoma City; heating and plumbing, to Oklahoma Plumbing Co.; electric work, Stores Electric Co.; roofing and sheet metal work, Roy Higgins; plastering, E. L. Gibbs; Gates Corgan, Archt., Shawnee. 8-11

Tenn., Memphis—Commerce Securities Co., 128 Madison Ave., offering \$900,000 bonds of Memphis Theater and Realty Co., care J. P. Edgington, for erection of theater and office building, at Beale Ave. and Main St.; Memphis Orpheum Co., incorporated by B. B. Kahane, Chicago, J. E. McCadden, and others, will operate theater; Rapp & Rapp,

Archts., State Lake Bldg., Chicago; contract let to Kaiser-Ducett Co., Joliet, Ill., at about \$750,000; furnishings, equipment, etc., cost additional \$300,000. Contrs. wire: "No sub-contracts awarded, plans not quite complete and practically no sub-bids received yet; will take sub-bids, all trades, for next 2 weeks."

Va., Kilmarnock—Kilmarnock Theater Corp., A. W. Wagenseller, Pres., let contract to John Q. Garrett, White Stone, for \$12,000 to \$15,000, 1-story, 100x40-ft., stucco theater building; Fred A. Bishop, Electric Bldg., Archt., Richmond.

Warehouses

Mo., St. Louis—Grinnell Co., 3900 Chouteau St., let contract to Gamble Construction Co., 620 Chestnut St., alter 1 and 2-story warehouse, \$30,000; plans by owners.

N. C., Wilmington—Tide Water Power Co., 223 Princess St., let contract to W. A. Simon for \$20,000, 3-story, brick, 64x111-ft. warehouse, Ninth and Orange Sts.; built-up gravel

roof; equipment and furnishings cost additional \$20,000; Lynch & Foard, Archts., Southern Bldg. 10-13

Tex., Victoria—W. G. Coffey erecting warehouse at Depot and Constitution Sts.; Ed. Wagner, Contr.

Tex., Wichita Falls—Biggs & Co., let contract to A. H. Smith, Fort Worth, for \$35,000, 1-story, basement and mezzanine, 100x150 ft., brick warehouse and office building at 14th St. and Lamar Ave.

Va., Roanoke—E. M. Herrington & Co., Owners-Contrs., McBain Bldg., laying foundation for 1 and 2 story, 40x150-ft. electrical supply warehouse, Sixth St. and Salem Ave.; concrete floors and foundation, Barber asphalt roof, cost \$16,500; electrical work, Richard-roof & Wayland; plumbing, J. E. Howell, 1508 S. Jefferson St.; structural steel, Virginia Bridge & Iron Co.; reinforcing, C. Grady Cates, Boxley Bldg.; steel windows, Roanoke Engineer Sales Co., 507 Second S. W. See Want Section—Building Materials and Equipment. 10-8

WANT SECTION

THE CLASSIFICATIONS IN THIS SECTION ARE:

Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

Machinery and Supplies

Blue Print Machine.—Charles Southwell Co., 407 Navarro St., San Antonio, Tex.—Wants to purchase 42-in. Pease blue print machine with washer and dryer.

Boilers, Engines, etc.—Texas Supply Co., Box 1777, Houston, Tex.—Wants to purchase used boilers, engines and machinery.

Casing (Oil Well).—See Oil Well Supplies, etc.

Concrete Mixer.—E. B. Bird, Box 35, Hawthorne, Ala.—Wants prices on concrete mixer.

Domestic Water Plants.—William Garrison, 274 Wyoming Ave., West Pittston, Penna.—Wants data and prices on air pressure systems for water plants in country homes; correspond with manufacturers.

Drill Sharpener.—L. J. Breed Equipment Co. (Mchy. Dealer) James Bldg., Chattanooga, Tenn.—Wants second-hand No. 60 Ingersoll-Rand drill sharpener.

Engines (Fire).—Robert S. Page, Pres.-Treas., The Henry Walke Co., Norfolk, Va.—Wants to purchase 20 to 40 gal. Underwriters Labeled chemical fire engine.

Generator Set.—Box 269, Summerville, S. C.—Wants direct connected generator, A. C. 480 volt, about 300 kv-a, Uniflow preferred; modern design; state price, condition, shop number, and full specifications.

Knitting Machines (Underwear).—See Textile Mill Mchy.

Oil Well Supplies, etc.—Texas Supply Co., Box 1777, Houston, Tex.—Wants to purchase any usable pipe, casing or machinery.

Paint Machinery.—Benson-Beckman Paint Co., 102-04 N. Commerce St., Mobile, Ala.—Wants prices on complete paint machinery.

Pulleys (Pressed Steel Split).—V. L. Nicholson Co., 102 W. Clinch St., Knoxville, Tenn.—Wants to purchase number of pressed steel split pulleys, correspond with manufacturers.

Radial Drill.—Hackley Morrison Co., Inc. (Mchy. Dealer) 204 N. Jefferson St., Richmond, Va.—Wants 3 to 4-ft. radial drill with tapping attachment.

Rail and Splices.—R. P. Johnson (Mchy. Dealer) Wytheville, Va.—Wants two or three track miles of 30 or 35-lb. relaying steel rails with splices; state price delivered f.o.b. Hazard, Ky.

Rip Saw Table.—R. P. Johnson (Mchy. Dealer), Wytheville, Va.—Wants dealers price on good light self-feed rip saw table, rebuilt or second-hand.

Sewing Machines.—See Textile Mill Mchy. **Steel Shear.**—S. C. Weber Iron and Steel Co., Alton Park, Chattanooga, Tenn.—Wants No. 2 Doelger & Kersten all steel shear, cut-

ting capacity 2½-in., second-hand, state price, condition, etc.

Textile Mill Machinery.—Sidney M. Edelstein & Co., East Main St., Union, S. C.—Wants sewing machines and balbriggan knitting machines for manufacturing rayon knit underwear.

Tie Plates.—L. J. Breed Equipment Co. (Mchy. Dealer), James Bldg., Chattanooga, Tenn.—Wants 8,000 second-hand tie plates for 80 lb. A. S. C. E. rail; state price, condition, location, etc.

Timber Sizer.—Box 269, Summerville, S. C.—Wants small timber sizer, good operating condition, state price and full specifications with builders catalogs, cuts, etc.

(1) **Rails**—steel, 4000 ft. of No. 12, second-hand preferred

(2) **Shovel**—½-yd. power, gasoline

(3) **Tank**—oil storage; used tank will answer.

American Brick Co., Inc., Nassar Bldg., McAllen, Tex.—Wants prices on the above.

(1) **Bottle Washer and Sterilizer**

(2) **Filling Machine**—for extracts, sauce, relish, etc.

(3) **Extract Plant Machinery and equipment.** Lady Baltimore Mayonnaise Co., 4002 Woodland Ave., Kansas City, Mo., wants prices on the above equipment.

(1) **Cars**—twenty 15 ton side dump

(2) **Crushers**—two 1000 ton

(3) **Locomotive**—32 ton standard Heisles

(4) **Rails**—7½-miles 45 lb.

(5) **Steam Shovel**—four 4½-yd. with drag lines.

Missouri Asphalt Refining Corp., Sheldon, Mo., wants the above equipment for development of 1000 acres asphalt deposits.

Miscellaneous

Advertising Novelties.—J. A. Sebastian, 601 State Bank Bldg., Box 1066, Orlando, Fla.—Wants data and prices on advertising novelties; correspond with manufacturers.

Concrete Forms (Burial Vault).—General Utilities Co., 254 W. Tazewell St., Norfolk, Va.—Wants data and prices on forms for making concrete burial vaults; correspond with manufacturers.

Pipe.—See Oil Well Supplies, etc.

(1) **Steel Lockers**—for club house

(2) **Drinking Fountains**—for golf course

(3) **Sand Boxes**

Golf Ball Washers.

Seabreeze Golf Course, E. L. King, Owner, 1235 S. Atlantic Ave., Daytona Beach, Fla., rebuilding golf links and wants the above.

Textiles.—The Dura-Back Co., Inc., 1001 First Natl. Bank Bldg., Charlotte, N. C.—Wants prices on various fabrics suited to manufacture of childrens, youths and adults underwear.

Nathan P. Cox, Jr., 107 E. Washington St., Greenville, S. C.—Wants manufacturers catalogs of office supplies, furniture and appliances.

W. Oscar Orr, West Ave., Kannapolis, N. C., wants to purchase efficient rust removers, solvents for iron or steel rust, to clean machine parts, etc.

R. T. Stephenson, care of Eudora Bank & Trust Co., Eudora, Ark., wants to correspond with firms supplying service station plans, data, etc.

(1) **Books**—income record for bus lines

(2) **School Bus Bodies**

(3) **Windshield Wipers.**

E. B. Bird, Box 35, Hawthorne, Ala., wants prices on the above for use in operation bus line.

(1) **Gardening Machinery, etc.**

(2) **Plants**

(3) **Spraying Materials.**

The Orchard Supply Co., R. G. Briggs, Mgr. (Landscape Engr.), 1908 Main St., Joplin, Mo., wants the above; also desires to correspond with manufacturers of orchard, vegetable gardening and landscape supply equipment.

(1) **Cemetery Supplies**

(2) **Iron Fencing**

(3) **Iron Gateways.**

Blue Grass Development Co., Fayette Bank Bldg., Lexington, Ky., developing 30 acre cemetery on Versailles-Lexington Pike, Louisville, and wants the above items.

Building Material and Equipment

J. D. Johnson, Contr., 726 East St., Hot Springs, National Park, Ark., wants prices on following for \$72,000 clinic and store building for Dr. H. King Wade:

Cast stone

Elevators

Flooring—terrazzo, tile

Limestone

Marble

Metal doors

Roofing—built-up

Steel Sash and Trim

Tile—gypsum, hollow, interior

Terra Cotta Trim.

Harper Contracting Co., Homerville, Ga., wants prices on following for \$15,000 school at Stockton:

Roofing—built-up.

C. A. Simons, 1010 E. Thirty-third St., Kansas City, Mo., wants to represent manufacturers of following in counties of Bourbon, Crawford and Allen, Kansas; also desires catalogs, prices, etc., on all kinds of building materials and supplies:

Insulations

Roofing Tile

Stucco

Paints

Reinforcing Steel.

A. L. Fancher, P. O. Box 353, Andrews, N. C., wants prices on following for residence fearing completion:

Electric Refrigerators
Steel Sash and Trim.
Palmer-Spivey Construction Co., P. O. Box 303, Charlotte, N. C., wants prices on following for \$370,000 barracks construction, Camp Meade, Md.:

Metal Doors
Roofing—slate
Steel Sash and Trim;
Also want sub-bids on
Electrical Work
Heating
Hardware
Limestone
Millwork
Plumbing.

Will N. Noonan Co., Archts., Builders Exchange Bldg., San Antonio, Texas, wants prices on following for remodeling store and hotel remodeling:

Flooring—tile.
J. E. Fox, 1615 Buchanan St., Washington, D. C., wants prices on following for 2 dwellings:

Electric Refrigerators
Flooring—linoleum, tile;
Also wants sub-bids on
Electric Wiring
Finish Hardware
Hot Water Heating
Plastering
Roofing—slate
Tile Work.

Leland I. McMullen, 302 E. Tenth St., Trenton, Mo., wants prices on following for residence:

Electric Wiring and Fixtures
Flooring—hardwood
Mall Chutes
Roofing—asphalt shingle.

E. M. Harrington & Co., Owners-Contrs., McBain Bldg., Roanoke, Va., wants prices on following for \$16,500 wholesale building:

Metal doors (Kinnear).
E. B. Bird, Box 35, Hawthorne, Ala.—Wants prices on:

Cement.
John S. Cox, 630 Idlewild Circle, Birmingham, Ala., wants prices on following for \$50,000 residence:

Flooring—hardwood, tile
Incinerator
Roofing—slate.

R. L. Cook, Bernice, La., wants prices on following for \$20,000 Baptist church:

Limestone
Metal Ceilings
Rolling Partitions
Roofing—asbestos shingle, asphalt shingle.
Baldwyn Brick and Tile Co., Baldwyn, Miss., wants prices on following:
Brick—buff face
Tile—flooring, bathroom and roofing.

Goodwin & Blane, Contrs., Bastrop, La., want prices on following for \$10,000 funeral home:

Flooring—terrazzo.
T. M. Otrich Co., 408 Park Ave., Orlando, Fla., wants prices on building material, hardware, etc., for 5-, 6- and 7-room dwellings.

Frank L. Townsend, 1434 S. Denver St., Tulsa, Okla., wants prices on following for \$68,000 apartment building:

Cast stone
Electric refrigerators
Flooring—hardwood, linoleum and tile
Incinerator
Roofing—composition
Tile—gypsum and hollow.

Warren, Knight & Davis, Archts., Empire Bldg., Birmingham, Ala., want prices on following for brick veneer dwelling:

Electric refrigerators
Flooring—hardwood, linoleum, tile
Incinerator
Limestone
Metal Doors
Roofing—slate
Steel Sash and Trim
Tile—hollow.

Bids Asked

Automobile.—H. L. Washburn, Harris County Auditor, Houston, Tex.—Receives bids Nov. 14 for automobile.

Bobbinet.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 28, to furnish 200,000 yds., bobbinet; delivery Philadelphia, Pa. Sch. 227

Boilers.—U. S. Coast Guard Headquarters, Washington, D. C.—Receives bids Nov. 14 for 3 furnace single and Scotch marine type boilers.

Bridge.—State of Alabama receives bids for 4 bridges and approach. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—West Palm Beach, Fla., receives bids for 4 bridges. See Construction News

—Roads, Streets, Paving.

Bridge Approach, etc.—West Palm Beach, Fla. See Construction News—Bridges, Culverts, Viaducts.

Brushes, etc.—Quartermaster Supply Officer, Ft. Sam Houston, Tex.—Receives bids Nov. 23 for 1160 varnish brushes, 500 casting brushes, 1205 sash brushes, 4351 hand scrubbing brushes, etc.

Cable and Reels.—Office of Ch. of Engrs., Washington, D. C.—Receives bids Nov. 18 for quantity of cable and reels.

Caustic Soda.—Pur. Clk., Bureau of Engraving and Printing, Washington, D. C.—Receives bids Nov. 11 for 60,000 lbs. caustic soda.

Cloth.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids, Nov. 25, to furnish 200 yds. beaver green and 600 yds. scarlet cloth; delivery Philadelphia, Pa. Sch. 240

Coal Bags.—Quartermaster, Fort Eustis, Va.—Receives bids Nov. 11 for 100 coal bags.

Coats (Sheepskin).—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 22 to furnish 300 sheepskin coats, delivery Philadelphia, Pa. Sch. 424.

Conduit.—Ch. of Engrs., Washington, D. C.—Receives bids Nov. 21 for 29,000 ft. of wood conduits.

Cotton Tape.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 21, to furnish 200,000 yds. cotton tape, delivery Philadelphia, Pa. Sch. 243.

Dock, etc.—City of Punta Gorda, Fla., D. F. Smoak, Mayor-Commr.—Receives bids Dec. 1 to furnish labor, material for construction municipal dock, channel and turning basins; quantities involved are: 26,000 cu. yds. dredged excavation; 47,000 cu. yds. dredged embankment fill; 910 lin. ft. steel sheet piling bulkhead; 94 cu. yds. reinforced concrete; 20,000 ft. B.M. bulk head timber in place and 5700 sq. yds. pavement; plans with C. K. Dodd, City Mgr.

Dredging, etc.—Comms. of Martin-St. Lucie Counties Improvement Dist., Stuart, Fla.—Receives bids Dec. 15 for dredging and rock removal at St. Lucie Inlet, in Martin and St. Lucie Counties; Gilbert A. Youngberg, Ch. Engr., 21 Laura St., Jacksonville.

Dredging Sleeves.—U. S. Engr. Office, Philadelphia, Pa.—Receives bids Nov. 17 for 825 rubber dredging sleeves.

Electric Fixtures.—U. S. Engr., Huntington, W. Va.—Receives bids Nov. 14 for electric fixtures.

Elevator (Electric).—Geo. J.ouchet, Sec., Police Jury, Lafayette Parish, Lafayette, La.—Receives bids Dec. 8, to furnish electric passenger elevator of special cab construction with complete installation; plans with Wm. T. Nolan, Archt., Canal Bank Bldg., New Orleans.

Filter Sand and Gravel.—Board of Awards, Office of City Register, Baltimore, Md.—Receives bids Nov. 16 to furnish and deliver filter sand and gravel to Bureau of Water Supply; Edward G. Rost, Water Engr.

Flushing Unit.—District Comms., Washington, D. C.—Receives bids Nov. 17 for 1 flushing unit, including chassis and flushing equipment.

Furniture.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 16 for furniture, screening equipment, lock boxes, for post office at McCamey, Tex.

Gravel.—Natchitoches, La. See Construction News—Roads, Streets, Paving.

Levee.—Mississippi River Comsn., Fourth Dist., River Front at Burdette St., New Orleans, La.—Receives bids Nov. 15 for Vick Crevasse Levee, left bank Red River, Avoyelles Parish, in Saline Levee Dist., new work, 131,000 cu. yds.; W. H. Holcombe, Major, Corps of Engrs., Dist. Engr.

Lubricators.—U. S. Engr., Huntington, W. Va.—Receives bids Nov. 10 for 36 lubricators.

Lumber.—Quartermaster, Supply Officer, Washington, D. C.—Receives bids Nov. 11 for 6000 ft. b.m. Southern pine lumber.

Miscellaneous Supplies.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 14 for following:

Hand valve grinder; portable electric drills; tappet wrenches; three jaw Universal wheel puller; 1 ton capacity chain hoist, etc.

Motors.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 16 for 935 motors for cancelling machines.

Motor Trucks.—State Highway Dept., Dover, Delaware.—Receives bids Nov. 30 for six 2½-ton, four-wheel drive motor trucks; plans on file.

Nitrogen and Coke.—Chemical Warfare Service, Edgewood Arsenal, Md.—Receives bids Nov. 14 for 42,240 cu. ft. nitrogen and on Nov. 10 for 200 tons coke.

Office Furniture and Supplies.—Quarter-

master Supply Office, Ft. Sam Houston, Tex.—Receives bids Nov. 25 for folding chairs, office chairs, water coolers, pencil sharpeners, etc.

Paper.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 11 for 124 rolls paper for use on tabulating machine.

Paving.—See Sewers, etc.

Paving.—Dawson, Ga. See Construction News—Roads, Streets, Paving.

Paving.—Enid, Okla. See Construction News—Roads, Streets, Paving.

Pier Sub-structure.—Port Development Comsn., James H. Preston, Chrmn., Baltimore, Md.—Receives bids Nov. 23 at office of City Register, City Hall, for preliminary work and building pier sub-structure for McComas Street terminal improvement; 873x216-ft., faced with concrete wall; all work included in contract to be finished on or before June 1, 1928; plans and specification with The J. E. Greiner Co., Conslt. Engr., Lexington Bldg.; Wm. F. Broening, Pres., Board of Awards.

Pipe (Galvanized).—City of Bay St. Louis, Miss., Sylvan J. Lander, Sec.—Receives bids for 900 ft. 2-in. galvanized pipe, new or used; prices f. o. b. Bay St. Louis.

Police Station.—State Highway Dept., Dover, Delaware.—Receives bids Nov. 30 for State Highway Police Station, State Road; plans on file.

Printing and Stationery.—Board of Awards, Wm. F. Broening, Pres., Baltimore, Md.—Receives bids Nov. 23 at office City Register, City Hall, to furnish miscellaneous printing and stationery supplies for 1928 to various departments of City of Baltimore; Edmund J. Wachter, City Purchasing Agent.

Pumps (Centrifugal Motor Driven).—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 12, to furnish 2 fresh water pumps, centrifugal motor driven and one cold water meter; delivery Parris Island, S. C. Sch. 245.

Pumping Equipment and Pipe.—City, M. E. DuBose, Mayor, Devine, Tex., Walton & Arneson, Engrs., 418 Gunter Bldg., and San Antonio; Lloyd D. Royer, Conslt. Mechanical Engrs., Travis Bldg., San Antonio.—Receives bids Nov. 15 for furnishing labor and material and equipment for installing:

- (1) **Deep well pump**—to handle water from deep well and deliver to concrete ground storage tank
- (2) **Motor-driven centrifugal service pump**—to handle 200 g.p.m. from concrete ground storage tank and deliver at pressure of 150-ft. head to lines leading to elevated tank and to street mains
- (3) **Motor-driven fire pump**
- (4) **Electrical distribution system**
- (5) **Piping system**—including valves, drains, fittings, nuts, etc.
- (6) **Automatic control system**
- (7) **Installation of indicating pressure gauges.**

Recoil Oil.—Commanding Officer, San Antonio Arsenal, Tex.—Receives bids Nov. 17 for 1000 gals. light recoil oil.

Road.—Russellville, Ark. See Construction News—Roads, Streets, Paving.

Road.—State of Alabama—See Construction News—Bridges, Culverts, Viaducts.

Road.—Birmingham, Ala., receives bids for 9 roads. See Construction News—Roads, Streets, Paving.

Road.—State Highway Dept., Dover, Delaware.—Receives bids Nov. 30 for roads in Cont. No. 97, 2.834 mi. Corbit-Bear, 17,000 cu. yd. excavation and borrow, 5,000 cu. yds. cement concrete pavement, 15,000 lb. reinforcement; Cont. 91, 1 mi. grading and surfacing earth road; plans on file.

Road.—Fairmont, W. Va. See Construction News—Roads, Streets, Paving.

Road.—State of Texas receives bids for 4 roads. See Construction News—Roads, Streets, Paving.

Road.—West Palm Beach, Fla., receives bids for 2 roads. See Construction News—Roads, Streets, Paving.

Road.—Natchitoches, La., receives bids for 2 roads. See Construction News—Roads, Streets, Paving.

Roadwork.—Supervising Archt., Treasury Dept., Washington, D. C.—Receives bids Nov. 17, for driveway improvements at U. S. Marine Hospital, Louisville, Ky.

Scale.—Director of Purchase and Sales, Department of Agriculture, Washington, D. C.—Receives bids Nov. 11 for 1 dormant automatic scale for Beltsville, Md.

Sewers, etc.—Town of Forest, Miss., R. L. Noblin, Clk., Massena L. Culley, Engr., Jackson.—Receives bids Dec. 8 for street paving, storm sewers, water mains and appurtenances; bids received on brick, concrete and asphaltic types.

Shoes (Arctic).—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 23 to furnish 1500 prs. arctic shoes; delivery Philadelphia, Pa. Sch. 241.

Sidewalks.—Joplin, Mo. See Construction News—Roads, Streets, Paving.

Skylight Repairs.—J. W. Stewart, Custodian, U. S. Post Office, Richmond, Va.—Receives bids Nov. 16 for repairs to skylight of U. S. P. O. building.

Steel Castings.—U. S. Engr., New Orleans, La.—Receives bids Nov. 17 for 2 cast steel suction heads and 2 cast steel impellers.

Steel (Locomotive Jacket).—Norfolk & Western Ry. Co., Clyde Coker, Purchasing Agt., Room 331, N. & W. Ry. Bldg., Roanoke, Va.—Receives bids Nov. 16 for 700 sheets locomotive jacket steel Contr. Serial AA-495.

Street.—Baltimore, Md. See Construction News—Roads, Streets, Paving.

Street.—Orange Park, Fla. See Construction News—Roads, Streets, Paving.

Street.—Tampa, Fla. See Construction News—Roads, Streets, Paving.

Surgical Instruments and Accessories.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 15 for surgical instruments and accessories.

Tables.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 14 for 50 dining tables, round, fumed oak finish.

Tractor.—Charles E. Gross, Dallas County Auditor, Dallas, Tex.—Receives bids Nov. 14 for 5 ton, weight 10,102 lbs., 35 h.p. on draw bar and 44.1 h.p. S.A.E. rating crawler type tractor without top, f. o. b. Dallas.

Transformers, etc.—Office of Ch. of Engrs., Washington, D. C.—Receives bids Nov. 14 for 2 transformers, 6 switches, 1 combination Navy Surplus Material to Be Sold.

safety plug puller and switch hook, 15 bus bar supports, 16 cutouts, 4 transformers, etc.

Truck.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 19 for 1-ton capacity truck.

Truck and Trailer, etc.—H. L. Washburn, Harris County Auditor, Houston, Tex.—Receives bids Nov. 16 for truck and trailer; feed; milk.

Trucks (Dump).—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 11, to furnish dump trucks; delivery Philadelphia, Pa. and Parris Island, S. C. Sch. 244.

Valves.—U. S. Engr., Huntington, W. Va.—Receives bids Nov. 12 for 255 globe valves.

Vegetable Peeling Machine.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 18 for potato parer, 50 lb. capacity; motor to be wound for 110-220 volts, single phase, 60 cycle, A.C. connected for 220 volt service.

Water.—See Sewers, etc.

Water Works Equipment.—City of Tuscaloosa, Ala., M. G. Kersh, Clk., plans changing source of water supply and wants data and prices on the following:

- (1) Pipe—concrete pressure
- (2) Pipe—cast iron
- (3) Sluice Valves.

Wharf.—State Highway Dept., Dover, Delaware.—Receives bids Nov. 30 for State Wharf at Little Creek, 70 lin. ft. timber bulkhead, 10-ft. span timber bridge; plans on file.

Wreck Removal.—U. S. Engr., Baltimore, Md.—Receives bids Nov. 12 for removal of sunken vessels, etc.

X-Ray Equipment.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 14 for X-ray equipment.

name of the new company will be the American-LaFrance and Foamite Corporation. Sales offices and engineering representatives will be maintained in all principal cities of the United States and Canada. Affiliated companies will operate in foreign countries.

Trade Literature

A Short Concise Story About Rust.

The American Rolling Mill Company, Middletown, Ohio, have published a little folder with the title "Light on Your Rust Problems." Here the story of rust is told in an interesting non-technical style by a well-known research engineer. Furthermore, the narrative has the advantage of being short and concise. It can be read and digested in a few minutes.

Hyman-Michaels Equipment Bulletin.

Bulletin No. 130 of the Hyman-Michaels Company of St. Louis, Chicago and other cities is a machinery and industrial equipment list covering air compressors, boilers, cars, feed-water heaters, conveyors, crushers, derricks, hoists, gasoline locomotives, oil engines, sand pumps, steam pumps, blast-hole drills, drill sharpeners, tanks, electrical locomotives, motor generator sets, mine hoists, mine cars, etc. The St. Louis address is Railway Exchange Building and the Chicago address is Peoples Gas Building.

Air-Made Wells With Sullivan Equipment.

The Air-Made Well Company, 725 Herskowitz Building, Oklahoma City, Okla., have published several exceedingly interesting bulletins concerning Air-Made wells with Sullivan air-lift pumping systems of the Sullivan Machinery Company, 122 South Michigan avenue, Chicago, Ill. These bulletins are numbered, respectively, 53-J, 54-J, 55-J, 56-J and 57-J. Each is finely and appropriately illustrated and gives full particulars concerning these wells and the Sullivan equipment used. Several interesting reports of the successful use of the equipment are included.

Complete Sheet Steel Directory.

The Sheet Steel Trade Extension Committee, Oliver Building, Pittsburgh, Pa., has compiled and published a large and fine volume of nearly 450 pages, entitled "5000 Sheet Steel Products and Who Make Them." It is an admirably arranged and finely printed directory, which will be appreciated by dealers and users of sheet-steel products of all kinds. The classification is of such a character that the book is easy to use for reference and it is not too bulky, although it is comprehensive and complete. The cover is in imitation of a sheet of steel and the binding is strong and handsome. The price of the book is \$3.

"Protect the Joint and Save the Setting."

A booklet published under the above title by the Johns-Manville Corporation, 292 Madison avenue, New York city, will be of interest to all users of refractory materials. As temperatures have increased, the operating conditions of settings have become more severe, and a careful and scientific study of firing conditions throughout the manufacturing world is contained in the booklet. There are also specifications for settings used by all branches of industry. Every engineer who desires a copy of this book can obtain it by addressing a request to the company in New York or at any of its agencies.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers, whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Sale of Navy Surplus.

Elsewhere in this issue formal announcement is made that there will be an auction sale of navy surplus and surveyed material at the navy yard, Boston, Mass., on November 29, which will include ferrous and non-ferrous metals, boiler tubes, cables, boats, paint, furniture, trucks, automobiles and such other goods as mentioned in the advertisement. Catalogues may be obtained from the supply officer at the navy yard in Boston or from the Bureau of Supplies and Accounts, Navy Department, Washington, D. C.

A New Firm Organized.

A. L. Aderton, C. L. Johnson and Frank E. Mayer, directors of the Hockenbury System, Inc., Harrisburg, Pa., with which they were connected for some years, have resigned from that organization and formed a partnership under the name of Aderton, Johnson & Mayer for the organization and direction of commercial, industrial and philanthropic projects. Mrs. M. R. Waidlich, also formerly with the Hockenbury System, will be office manager and bookkeeper of the new firm, whose offices are at 107 Hillside Road, Harrisburg, Pa.

Colonial Iron Works Announcement.

A circular announcement of the Colonial Iron Works Company, 17643 St. Clair avenue, Cleveland, Ohio, says that they have added conveyor equipment to their material-handling department; also that G. A. Parker, B. S., M. E. and E. E., is now connected with the company to render consultation, designing and estimating service. The company are contractors and builders of steel sheet, plate and structural work. Their new location at this address is at Collinwood Yards, on the New York Central Railroad.

A Fine, Large Sales Survey.

The J. S. Schofield's Sons Company, Macon, Ga., manufacturers of engines, boilers, machinery, mill and machinists' supplies, report that they have made a survey of the 18 States where their products have been sold during the last nine months, besides in the District of Columbia. They range from Massachusetts to Iowa and from Florida to the Mississippi River. Since this report was compiled the company have recently closed a contract for a 500,000-gallon elevated water-storage tank for the city of Monroe, La., making 19 States in all, or else 20, if the District of Columbia be called a State. A large percentage of the sales has been made in New York State, 90 per cent of these being for export shipments to Hawaii, Argentine, Brazil, Central America, Cuba and Porto Rico. The business began as a foundry 75 years ago and has steadily progressed to its present imposing dimensions and varied products.

Virginia Industrial Plant For Sale.

Elsewhere in this issue is an advertisement of Clifton Reeves and Staff, industrial engineers, New York city, calling attention to the sale of a modern industrial plant in Nelson county, Virginia, near Arrington and Norwood, 35 miles south of Charlottesville and 25 miles north of Lynchburg. The plant was built in 1925.

American-LaFrance Absorbs Foamite-Childs.

The American-LaFrance Fire Engine Company, Inc., of Elmira, N. Y., has recently acquired the assets and good will of the Foamite-Childs Corporation of Utica, N. Y., and the business of the two companies will be combined under a single corporate identity. The

Book Reviews

History of the Incandescent Lamp. By John W. Howell and Henry Schroeder. Schenectady, N. Y.: The Maqua Company. 1927. Cloth. Gilt. Pp. 208.

Here we have in eight wonderful chapters the thrilling narrative of the gradual development of the familiar everyday electric-light bulb which was first made successfully by Thomas A. Edison, well named "The Wizard of Menlo Park." The first chapter relates the story of preliminary efforts throughout a long period of time leading up to the years when Edison took hold of the idea of a successful glowing lamp and pushed it through by his indomitable energy and untiring mind. The early days at the Menlo Park works; the slow but steady progress made in manufacturing methods so as to produce lamp bulbs in commercial quantities are all described with fascinating detail. Finally, the history proceeds until it comes to the days when the old, simple carbon filament was followed by the tungsten lamp, with its white brilliance of illumination, this having become possible, it appears, as a result of the work of Dr. William D. Coolidge of the research laboratories of the General Electric Company after he had succeeded in making tungsten ductile on a commercial scale. There is an abundance of most interesting and pertinent pictures throughout

the book, one of which is of Dr. Irving Langmuir of the same laboratories, showing to Mr. Edison a 30,000-watt lamp made for experimental purposes, a lamp which is of 100,000-candle power. These sentences afford the reader a general idea of what he may anticipate on opening the little volume. It is a work which once taken up will be put down again with reluctance.

Corporation Treasurer's and Controller's Guide. By William H. Crow, A. B., LL. B. New York: Prentice-Hall, Inc. 1927. Cloth. Gilt. Pp. 1657. \$15.

This volume contains a large amount of information about how the treasurers and controllers of various corporations handle their work. It gives the facts about organizing budget systems and also presents a most complete collection of actual forms used by treasurers and controllers. It is a ready reference manual that describes in detail the organization and work of the treasurer's, the controller's and the auditor's departments of large and small corporations and discusses the financial, the accounting and the legal aspects of the work. It is based upon the actual experience of corporation officials in the performance of their duties, whether specified by statute or by the by-laws, or else otherwise required in the conduct of business. It is a combination of methods, experiences and pre-

cedents. The book brings together the detailed experiences of financial officers of 1400 American corporations, including American Tobacco Company, New Jersey Zinc Company, Saks Company, Colgate & Co., General Motors Corp., Famous Lasky-Players Corp., Robert Gair & Co., National Biscuit Company, American Chiclet Company, Standard Oil Company of New Jersey, National Cloak and Suit Company, Delaware, Lackawanna and Western Railroad, New York Edison Company, Bethlehem Steel Company, International Mercantile Marine Corp., Durant Motors, Inc., Equitable Life Assurance Society, National Surety Company, Cleveland Hardware Company, Detroit Copper and Brass Rolling Mills, Pacific Steamship Company and many others, including small corporations.

Hell Truck Tanks and Storage Tanks.

Hell fuel oil truck tanks with pump units and also storage tanks of the same make are fully described and illustrated with photographs and diagrams in two bulletins that were lately published by the Hell Company of Milwaukee, Wis. The material is very complete and shows installations on a number of trucks and also at storage stations. It is stated that these tanks are built by the electric arc-welding process and are absolutely leak-proof. The bulletins are numbered, respectively, 176 and 177.

800-Acre Development at Farmington, Va.

Details outlining a new development near Farmington, Va., to embrace an area of 800 acres of land have been submitted by E. S. Draper, landscape architect and engineer, of Charlotte, N. C., and Atlanta, Ga., who has been retained to prepare plans for the layout. The project has been undertaken by Farmington, Inc., of which Major Graves is president; D. G. Stevens, secretary and manager, and J. H. Lindsay, chairman of the executive board. The property, located just beyond the University of Virginia, will be developed for Country Club purposes and will include an 18-hole golf course, steeplechase course, bridle trails, tennis courts, archery course, swimming pool, amphitheater, roadways and streets for homes of club members. Ultimate plans contemplate an additional 18-hole golf course, resort hotel, and a sub-division development of from 1 to 5 acre tracts. Fred Findley of Richmond, Va., will plan and supervise construction of the proposed golf course and Lee Williamson of Charlottesville, Va., will be the engineer in charge of improvements.

\$2,751,162 of Building Permits for October.

Stanley C. Draper, manager of the Chamber of Commerce, Oklahoma City, Okla., advises that Oklahoma City's building permits for the month of October represent a cost of construction of \$2,751,162, bringing the total for the first ten months of the year to \$12,779,453. Big construction projects aggregating \$3,000,000 in cost will be started during the remaining two months of 1927, so that the aggregate for the year is expected to go much beyond \$15,000,000, the largest in the city's history.

\$500,000 Hospital Building Program Projected.

Milledgeville, Ga.—A special committee of the board of trustees of the State Sanatorium here has engaged the Shi Engineering Company of Macon, Ga., to make a survey and map of the properties as the first step in a building program outlined by the trustees. Members of the committee include E. E. Lindsey, Rome; Dr. Latens Saunders, Commerce; A. C.

Newell, Atlanta; R. H. Pitner, Athens; P. H. Gambrell, Macon, and Dr. R. C. Swint, superintendent of the institution. The legislature has appropriated \$500,000 for new buildings and work is expected to begin soon after the survey has been completed.

\$2,500,000 Expenditure for Texas Irrigation District.

Mission, Texas.—Preliminary steps have been taken by landowners of the Mission and Sharyland communities of the Lower Rio Grande Valley to organize a new irrigation district which will embrace 34,000 acres. The total cost of improvements is estimated by engineers at approximately \$2,500,000. This would include the construction of new canals, concrete-lined ditch system and other equipment. The project has received the endorsement of farmers here and a petition is being circulated among landowners of the proposed district asking the county commissioners' court to call an election on the question. If the election carries, the State Board of Water Engineers will be furnished with plans and estimates and requested to give its official approval of the project.

\$240,000 Hotel Projected for Cushing, Okla.

R. V. Slagel, secretary of the Cushing Chamber of Commerce, Cushing, Okla., advises that plans are being advanced for the erection of a \$240,000 hotel at Cushing and that T. J. Hughes is chairman and secretary of an executive committee promoting the project. The Cushing Community Hotel Company will be incorporated to build and own the hotel, for which a site has been selected on Broadway, easily accessible to the business district of the city and conveniently located between the two railroad stations. Construction of the building will be financed by the sale of \$240,000 of 6 per cent preferred stock, to be sold in units of two shares of preferred and one of common stock at \$201. The Hockenbury System, Inc., of Harrisburg, Pa., has made a survey to determine the need of a hotel and to recommend a definite financing program.

\$1,700,000 Telephone Building for Oklahoma City.

An accompanying illustration presents a view of the new building to be erected in Oklahoma City by the Southwestern Bell Telephone Company of St. Louis, at an estimated cost of \$1,700,000. General contract for the structure, as reported in the MANUFACTURERS RECORD of November 3, has been awarded to the Hughes-O'Rourke Construction Company of Dallas, Texas, and contract for heating, plumbing and ventilating to Cook & McDonnell of Oklahoma City. The building will be of steel frame construction with brick exterior, stone trim, concrete floors and tar and gravel roof. Equipment will cost about \$1,250,000, it is said.

Layton, Hicks & Forsyth of Oklahoma City are the architects, and I. R. Timlin of St. Louis, associate architect, while



THE NEW TELEPHONE BUILDING AS IT WILL APPEAR.

W. J. Knight & Co. of St. Louis, are the structural engineers, and Louis Lefler of Oklahoma City, mechanical engineer. Electrical engineering details are being handled by H. H. Morrison and foundation contract was awarded several months ago to the Westlake Construction Company and structural steel contract to the Mississippi Valley Structural Steel Company, both of St. Louis.

Piedmont Print Works Plant Site Selected.

Taylors, S. C.—It has been definitely decided to locate the plant of the Piedmont Print Works, which was recently incorporated with a capital stock of \$1,000,000, on the west side of the Southern Railway tracks here and within a few hundred yards of the Southern Bleachery. This location will be acces-

sible to both the Piedmont and Northern and Southern Railway. Plans for the plant are being prepared by J. E. Sirrine & Co. of Greenville, S. C., and contract is expected to be awarded within a few weeks. Sixty dwellings for employees will be erected on the Enoree River. H. R. Stephenson, president and manager of the Southern Bleachery, Inc., will be manager of the new plant.

More Dividend Increases.

A study of the cash dividends paid by 5959 companies, representing dividend payments on approximately 8000 preferred and common stocks, in the first six months of 1927 and the first six months of 1926, has been made by the accounting organization of Ernst & Ernst, New York city. It is stated that the aggregate amount of dividends was not covered, but that the study seems to show increase of payments for this year, which, of course, are the results of earnings in 1926, or previous years.

| Group | Total | Increases | | Decreases | | No change | |
|--------------------------------------|--------------------------------|-----------|------|-----------|------|-----------|------|
| | | No. | Pct. | No. | Pct. | No. | Pct. |
| Banks and trust cos.... | 703 | 287 | 40.8 | 163 | 23.2 | 253 | 36.0 |
| Commercial companies.. | 1276 | 481 | 37.7 | 304 | 23.8 | 491 | 38.5 |
| Mining and oil cos..... | 393 | 145 | 37.0 | 95 | 24.2 | 153 | 38.8 |
| Manufacturing companies | 1696 | 576 | 34.0 | 466 | 27.5 | 654 | 38.5 |
| Public utilities and railroads | 1120 | 341 | 30.5 | 246 | 21.9 | 533 | 47.6 |
| Miscellaneous companies | 771 | 282 | 36.6 | 200 | 25.9 | 289 | 37.5 |
| Total and average.... | 5959 | 2112 | 35.5 | 1474 | 24.7 | 2373 | 39.8 |
| Paying higher dividends | 2112 companies, 35.5% of total | | | | | | |
| Paying lower dividends | 1474 companies, 24.7% of total | | | | | | |
| Paying same dividends | 2373 companies, 39.8% of total | | | | | | |

No dependable data is available to show the actual amount of aggregate dividend payments at any time, Ernst & Ernst point out. "These figures suggest, but do not prove, that dividends in the first half of 1927 were higher than in 1926, which was assumed to be a high year. The figures suggest, furthermore, that dividends have made available unusually large sums for reinvestment."

Dairy Number of "East Texas."

Appropriately entitled "Dairy Number," the October issue of "East Texas," official publication of the East Texas Chamber of Commerce, says in an editorial: "The success of dairying in East Texas is assured. If those now living in East Texas and tilling East Texas soil fail to grasp the opportunities offered, they will be snatched up by outsiders." Also, the issue quotes prominently an axiom from the MANUFACTURERS RECORD, "Prosperity Follows the Dairy Cow."

In an interesting article, A. L. Darnell, professor of dairy husbandry, Texas Agricultural and Mechanical College, says that "East Texas is beginning to see the relationship between dairies and dollars," and Cyril A. Parker avers that "Panola county begins to realize on its natural resources." The prominence of East Texas in the recent dairy exposition at Memphis, Tenn., is described in another article, and Les Akers, "the Pittsburgh philosopher," advises "the farmer in financial difficulties to look over the cow lot for the sign. 'This Way Out.'"

The Dairy Number also contains other informing articles and is profusely illustrated.

Mason Fiber Company to Double Plant.

According to a recent announcement, the Mason Fibre Company of Laurel, Miss., manufacturers of structural insulation, plans to double the capacity of its Laurel plant. The company, whose main offices are in Chicago, confirms this announcement, stating that it has made no contracts but will probably do the work with its own force. W. H. Mason of Laurel is vice-president and general manager of the company.

"Virginia Products That Excel."

Probably, no more attractive booklet of its kind, in both information and physical form, has come to the MANUFACTURERS RECORD of late than "The Story of Virginia Products That Excel," issued by the State Department of Agriculture and Immigration, of which George W. Koener is commissioner. The interesting and convincing reading material is illuminated with beautiful illustrations, all made the more attractive as printed on the finest paper.

At first truly saying that "some Virginia food products are as far-famed as some Virginia Presidents," the booklet turns to the subject of apples and describes and illustrates the great apple industry of the Shenandoah Valley and the Virginia Piedmont. Then, Virginia's Smithfield Ham. "What is a Smithfield Ham?" the booklet asks, and answers: "As to quality, it is meat for the epicure; however, the type of hog, manner of raising, manner of curing, all contribute to the distinctiveness of the Smithfield Ham." Virginia peanuts are portrayed in type and pictures, and Virginia tobacco. In speaking of Virginia beef, the booklet relates that "many pastures have been grazed continuously 40 years, some 60 and even more, with no immediate prospect of being contaminated by the plow."

Virginia potatoes, Virginia cabbage and Virginia seafood also fill short chapters, and through some chapters run the Lee Highway and the Tidewater Trail, with engaging illustrations. The booklet is of real interest and value.

Contracts on \$250,000 School Building.

The Swenson Construction Company, Kansas City, Mo., general contractor for the erection of a \$250,000 building in that city for French Institute of Notre Dame de Slon, wires that the following sub-contracts have been awarded:

Doors—Thorp Fireproof Door Company, Minneapolis, Minn.
Metal trim—Sykes Company, Chicago.

Millwork—Uhrich Millwork Company, Independence, Kan.
Ornamental iron—Southwest Wire and Iron Works Company, Kansas City.

Glazing—Pittsburgh Plate Glass Company, Pittsburgh, Pa.
Reinforcing steel—Concrete Steel Company, New York.

Roofing and waterproofing—Western Roofing Company, Kansas City.

Brick and tile—United Clay Products Company, Kansas City.

Sheet metal work—K-R Cornice Works, Kansas City.

Bedford stone—Kansas City Cut Stone Company.

Marble—Kansas City Marble and Tile Company.

Tile—Kansas City Mantel Company.

Terrazzo—International Terrazzo Company, Kansas City.

Slate roof—Kansas City Slate and Tile Roofing Company.

Joist forms—Flexible Form Company, Kansas City.

Metal lath—Cockrell Engineering and Fireproofing Company, Kansas City.

Heating and plumbing—W. R. Dunlap, Kansas City.

Electric wiring—Wyandotte Electric Construction Company, Kansas City.

The new building will be five stories, of reinforced concrete and brick construction. Maurice Carroll of Kansas City is the architect.

Plans Soon Ready for State Building in Baltimore.

Plans are expected to be ready by December 1 for the new \$200,000 building to be erected at Guilford avenue and 21st street, Baltimore, for the Motor Vehicle Commission of Maryland. The structure will include a section 40 by 160 feet for offices, another 50 by 50 feet for police headquarters, both to

be of two stories and basement, while a third section, to accommodate a garage and shop, will be 48 by 100 feet, of one story and basement. A steam-heating plant will be installed. William Gordon Beecher of Baltimore is the architect.

Bids for \$500,000 Public Building in Washington.

Washington, D. C.—Bids will be received until December 1 at the office of Public Buildings and Public Parks of the National Capital, Col. U. S. Grant 3d, director, Navy Building, for the erection of a building to commemorate the services and sacrifices of the women of the United States, its insular possessions and the District of Columbia in the World War. The structure will be about 120 by 60 feet, 60 feet high, of marble, steel and concrete, with concrete pile foundation and tile roof. It will be equipped with a hot-water heating plant, automatic electric elevator, and auditorium and stage. Trowbridge & Livingston of New York are the architects. The cost of the building is estimated at \$500,000.

Contract for Third Unit of \$4,500,000 Hospital Group.

Jackson, Miss.—General contract has been awarded at \$447,800 to I. C. Garber of this city for the erection of the third unit of eight buildings of the \$4,500,000 group under construction near Jackson for the Mississippi Insane Hospital. Cast stone contract has been awarded to the Loeb Stone Company, Memphis, Tenn., and contract for reinforcing steel and steel sash to the Southern G-F Company, Atlanta. Buildings included in this unit are two occupational therapy buildings, two infirmaries, power house, narcotic home and two re-educational buildings. N. W. Overstreet of Jackson is the architect and Henry C. Muskopf, St. Louis, landscape architect.

New Government Base Map of Mississippi Flood Area.

A map of a large part of the Mississippi Valley issued by the Geological Survey, Department of the Interior, should prove useful to students of the great national problem now before the country as a result of the recent disastrous floods of the Mississippi, says the department. For millions of years these floods have been building the valley and delta of the Mississippi.

"The great Mississippi basin is too valuable to remain unused," states the announcement. "No other river basin on the globe combines topography, soil and climate to make as attractive living conditions as those of the Mississippi. The basin will therefore be used more and more as the population of the country increases and its needs for food and other products of the lands are enlarged. With increased development and use of the valley lands, the floods have become more serious in the danger to both life and property, and the record flood of 1927 has called public attention to the impelling fact that effective plans must be made for keeping the damage from flood waters within bounds."

Plans 200 Miles Roads to Cost \$4,000,000.

Mobile, Ala.—Plans are being considered by the Mobile County Board of Revenue for a road construction program to embrace about 200 miles at a cost of approximately \$4,000,000. This program includes 88 miles which will be paid for by the County, State and Federal governments. Cost of construction will be borne by a bond issue, according to tentative plans.

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perience with Leadite extends over 20 years.

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FINANCIAL NEWS

Bond Issues Proposed

- Ala., Anniston—Sewer—City plans receiving bids soon for \$35,000 5½% bonds. Address City Clk.
- Ala., Atmore—Water Works—City votes Nov. 14 on \$20,000 bonds. Address City Clk.
- Ala., Tuscaloosa—Water Works—City, M. G. Kersh, Clk., votes Dec. 12 on \$350,000 bonds; W. H. Nichol, City Engr.
- Fla., Bradenton—School—Oneco Special School Dist. votes Nov. 15 on \$30,000 bonds. Address Board of Trustees.
- Fla., Crawfordville—Road—Wakulla County Commrs. plan \$150,000 bond issue.
- Fla., Fort Pierce—Inlet—Fort Pierce Inlet Dist., St. Lucie County, votes Nov. 25 on \$650,000 bonds. Address Inlet Commrs. 10-20
- Fla., Jacksonville—Street—City Comm. authorized \$25,000 bond issue.
- Fla., Manatee—Funding—City, Chas. J. Majory, Clk., receives bids Nov. 22 for \$50,000 6% \$100 denom. bonds.
- Fla., Moore Haven—Road—Glades County Commrs., N. S. Walnwright, Clk., wires in regard to sale of \$300,000, 6%, \$1,000 denom. Special Road and Bridge Dist. No. 11 bonds: "Action of Board deferred 2 weeks." Lately noted bids received Nov. 1. 10-6
- Fla., Panama City—Water Works—City defeated \$100,000 5% denom. bonds. 10-6
- Fla., Pensacola—City plans calling election in Dec. on \$250,000 bonds: \$100,000, city's share for street paving; \$75,000, sewer; \$50,000, library; \$25,000, improve Legion Field.
- Fla., St. Augustine—City votes Dec. 20 on \$305,000 bonds: \$75,000, water softening and filtration plant; \$150,000, fire station and fire fighting equipment; \$90,000, city's share for bridge over San Sebastian River; E. Noble Calhoun, Atty. 11-3
- Fla., St. Augustine—St. Johns County Board of Public Instruction, Evelyn Hamblen, Chmn., receives bids Nov. 29 for \$30,000 5½% \$1000 denom. Special Tax School Dist. No. 2 bonds. 10-27
- Fla., St. Petersburg—Airport—City Comm. voted \$8000 for airport.
- Fla., Vero Beach—Drainage—Indian River Board of Suprvs., Sebastian River Drainage Dist., plans bond issue.
- Fla., West Palm Beach—Refunding—City Comm. plans \$2,589,500 bond issue.
- Ga., Atlanta—City, B. Graham West, Comptroller, receives bids Nov. 17 for \$800,000 4½% \$1000 denom. bonds: \$500,000, school; \$150,000, sewer; \$150,000, water works.
- Ga., Brunswick—Municipal Improvement—City, C. M. Peddicord, Mayor, voted \$200,000 bonds: \$75,000, paving; \$75,000, annex to city hospital, etc.; \$50,000, extension. 10-13
- Ga., Moultrie—City votes in spring on \$100,000 bonds for school, sewer and water mains extension. Address City Clk.
- Ga., Smyrna—Water Works—City, P. M. Edwards, Mayor, voted \$35,000 bonds; plans selling bonds.
- Ky., Covington—Road—Kenton County plans voting in Nov. on \$500,000 bonds. Address County Commrs.
- La., Delhi—Paving—Town, S. E. Smith, Clk., receives bids Dec. 6 for \$65,000 \$1000 denom. not to exceed 6% bonds. 11-3
- La., Ferriday—Levee—Town, P. H. Corbett, Mayor, receives bids for \$50,000 bonds. 9-29
- La., Ferriday—Levee—City, P. H. Corbett, Mayor, voted bonds. 9-29
- La., Minden—Road—Webster Parish Police Jury, J. H. Nelson, Pres., receives bids Dec. 6 for \$115,000 6% Sub-Road Dist. No. 5 bonds.
- Miss., Canton—Road—Madison County voted \$600,000 bonds. Address County Commrs. 10-27
- Miss., Jackson—Hospital for Insane—State of Mississippi, Ben S. Lowry, State Treas., plans receiving bids for \$1,000,000 bonds; Dennis Murphree, Governor.
- Miss., Laurel—Road, Bridge—Jones County, Beat 2, reported, voted \$75,000 bonds. Address Board of Suprvs. 10-20
- Miss., Louisville—School—Mayor and Board of Aldermen plan \$100,000 bond issue.
- Miss., Louisville—School—City votes Nov. 16 on \$100,000 bonds. Address City Clk.
- Miss., Ripley—Water Works—City, S. Butler, Mayor, votes Nov. 23 on bonds.
- Mo., Adrian—Fire Truck—City voted bonds. Address City Clk.
- Mo., Marceline—Filtration Plant—City voted \$48,000 bonds. Address City Clk.
- Mo., Novinger—School—Novinger Consolidated Dist. voted \$35,000 bonds. Address Board of Trustees.
- Md., Oxford—Water Works—City Commrs., Henry Wilcox, Pres., receive bids Nov. 16 for \$40,000 5½% \$500 denom. bonds.
- N. C., Asheville—Water Supply—City Commrs. plan \$4,000,000 bond issue.
- N. C., Burgaw—Pender County Commrs., George F. Lucas, receive bids Nov. 21 for \$286,000 bonds: \$250,000 not to exceed 6%, road and bridge funding; \$30,000, Union Special School Taxing Dist.; \$6000 Burgaw Special School Taxing Dist.; \$500 and \$1000 denom. bonds.
- N. C., Cleveland—Street—Town, R. N. Moore, Clk., receives bids Dec. 5 for \$25,000 \$1000 denom. not to exceed 6% bonds.
- N. C., Concord—Cabarrus County Commrs. receive bids Nov. 16 for \$180,000 bonds: \$170,000 4½%, school; \$10,000 4½%, funding.
- N. C., Greenville—School—Greenville Graded School Dist., J. H. Rose, Sec., receives bids Dec. 13 for \$100,000, 5 or 4½%, \$1000 denom. bonds. 11-3
- N. C., Hayesville—Road, Bridge, Funding—Clay County Commrs. received high bid from Magnus & Co., at \$31,353, for \$30,000, 6%, \$1,000 denom. bonds; Glover P. Ledford, Clk. 10-6
- N. C., Hendersonville—Druid Hills Dist. voted \$55,000 bonds, for street improvement and storm sewers; Druid Hills Comm. plans selling bonds.
- N. C., Newbern—Craven County Commrs., John S. Holland, Clk., receive bids Nov. 15 for \$660,000 \$1000 denom. not to exceed 5% bonds: \$320,000, county funding; \$140,000, school funding.
- N. C., Pittsboro—Chatham County Commrs., C. C. Poe, Clk., receives bids Nov. 17 for \$100,000 4½% bonds: \$63,000, funding; \$37,000, school funding.
- Okla., Ada—School—City, Lee Daggs, Clk., receives bids Nov. 15 for \$615,000 5% \$1000 denom. bonds: \$425,000, water works; \$190,000, school. 11-3
- Okla., Bristow—Water Works—City votes Nov. 15 on \$44,000 bonds. C. L. Weatherford, Engr.
- Okla., Picher—Sewer—City defeated \$60,000 bond issue. Address City Clk. 9-1
- S. C., Columbia—Highway—Coastal Highway Comm., Wade Stackhouse, Chmn., receives bids Nov. 17 for \$1,000,000 4½%, \$1000 denom. bonds of Dillon, Florence, Williamsburg, Colleton, Beaufort and Jasper counties.
- Tenn., Petersburg—Water Works—City voted \$25,000 bonds. Address The Mayor.
- Tex., Abilene—Road—Taylor County Commrs., Court, Tom K. Eplen, County Judge, plans selling \$1,000,000 bonds. 11-3
- Tex., Alvin—City plans \$150,000 bond election: \$100,000, paving; \$50,000, sewer. Address City Clk.
- Tex., Anahuac—Road—Chambers County, L. R. Miller, County Judge, receives bids Nov. 14 for \$100,000 bonds.
- Tex., Corsicana—Road—Navarro County votes Dec. 3 on \$30,000 bonds; Warren Hicks, Judge.
- Tex., Del Rio—Road—Val Verde County, W. F. Littleton, Judge, considering \$250,000 bond issue.
- Tex., Edinburg—Road, Bridge—Hidalgo County, Mission Dist., considering \$2,000,000 bond election. Address County Commrs. Court.
- Tex., Edinburg—Water Control, etc.—Hidalgo County, Board of Directors, Water Control and Improvement Dist. No. 6, D. G. Wood, Pres., receives bids Nov. 17 for \$800,000 6% \$1000 denom. bonds.
- Tex., Edna—Road—Jackson County, Road Dist. No. 3, votes Nov. 12 on \$80,000 5½% bonds. 10-20
- Tex., Fort Worth—Water Works—Commrs. Tarrant County Water Improvement and Control Dist. No. 1 plan selling \$6,500,000 bonds in March or April. 10-20
- Tex., Hempstead—Road—Waller County considering \$1,500,000 bond election. Address County Commrs.
- Tex., Houston—Road—Harris County, Norman Atkinson, County Judge, receives bids Nov. 15 for \$2,000,000 4½% bonds; C. C. Washburn, County Auditor. 10-20
- Tex., Houston—School—H. L. Mills, School Business Mgr., receives bids Nov. 28 for \$200,000 Harrisburg Independent School Dist. bonds.
- Tex., Jourdanton—Roads—Atascosa County, Dist. No. 3, defeated \$350,000 bond issue. Address County Commrs. 10-6
- Tex., Kaufman—Road—Kaufman County, Fordney Precinct, voted \$40,000 bonds; Chas. Ashworth, Judge. 9-29
- Tex., Liberty—Road—Liberty County, C. R. Wilson, County Judge, considering bond election before end of year.
- Tex., Lindale—Water Works—City votes Nov. 14 on \$54,000 bonds. Address City Clk.
- Tex., McAllen—Refunding—City, F. B. Freeland, Mayor, voted \$491,000 bonds. 10-13
- Tex., Memphis—Road—Hall County, Turkey Road Dist., votes Dec. 3 on \$25,000 bonds; A. C. Hoffman, County Judge.
- Tex., Odessa—School—City considering \$175,000 bond election. Address City Clk.
- Tex., Pecos—Hospital—Reeves County votes Dec. 10 on \$40,000 bonds. Address County Commrs. 10-13
- Tex., Richmond—Road—Fort Bend County, W. I. McFarlane, Judge, receives bids Nov. 14 for \$675,000 bonds: \$225,000, 5½%, Road Dist. No. 8; \$150,000, 5½%, Road Dist. No. 10; \$250,000, 5½%, Road Dist. No. 11; \$50,000, 5%, Road Dist. No. 9.
- Tex., San Antonio—School—Board of Education, Frank S. Haines, Pres., will call election early in Dec. on \$1,500,000 bonds. 11-3
- Tex., Sonora—School—School Board may call bond election.
- Tex., Texas City—City, E. L. Noble, Mayor, voted \$250,000 bonds: \$150,000, school; \$100,000, municipal building. 10-6
- Tex., Tilden—Road—McMullen County votes March 11 on \$185,000 bonds. Address County Commrs.
- Tex., Tilden—Road—McMullen County, L. A. Martin, Judge, votes Nov. 19 on \$185,000 bonds.
- Tex., Uvalde—School—School Board, G. B. Fenley, Pres., receives bids Nov. 16 for \$150,000, 5% Uvalde Independent School Dist. bonds.
- Tex., Wheeler—Road, Refunding—Wheeler County votes Dec. 3 on \$1,000,000 bonds: \$880,000, roads; \$120,000, refunding. 11-3
- Tex., Yoakum—Public Improvement—City votes Dec. 5 on \$250,000 bonds. Address City Clk.

Bond Issues Sold

- Ark., Paragould—School—Board of Education, Paragould Special School Dist. No. 1, sold \$40,000, 6% bonds to M. W. Elkins & Co., Little Rock. 9-29
- Fla., Daytona Beach—Improvement—City, Walter A. Richards, Mgr., sold \$163,000 bonds to Stranahan, Harris & Oatis, Inc., Toledo, Ohio, at 102.90 and premium of \$4727.
- Fla., Monticello—Road—Jefferson County, J. T. Garwood, Clk., sold \$150,000, 5%, \$1,000 denom. bonds to Caldwell & Co., Nashville, Tenn. at 95 and accrued interest. 10-27
- Fla., Sarasota—Street—City, E. J. Bacon, Mayor, reported, sold \$100,000 bonds to Farson & Son, New York, at 96.
- Fla., Stuart—School—Board of Public Instruction sold \$50,000, 6%, \$1,000 denom. bonds to Florida Municipal Investment Co., West Palm Beach, at par.
- Fla., Tampa—Road, Bridge—Hillsborough County Commrs., W. A. Dickenson, Clk., sold \$120,000 6% Plant City Special Road and Bridge Dist. bonds to McDonald Construction Co., Lakeland, at 99.05.
- Fla., West Palm Beach—Road, Bridge—Palm Beach County Commrs., Fred E. Fenno, Clk., sold \$800,000, 5% bonds to Central Farmers Trust Co., West Palm Beach, at 96. 10-27
- Ga., Canton—Courthouse—Cherokee County Commrs., E. A. McCanless, Chmn., sold

(Continued on page 126)

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FINANCIAL NEWS

(Continued from page 124)

\$150,000, 4½%, \$1,000 denom. bonds to Robinson & Humphrey, Fourth National Co., and Bell, Speas Co., Atlanta, at par and premium of \$6,810.

Ky., Augusta—Water Works—City sold \$30,000 5% bonds to Walter, Woody & Helmdinger, Cincinnati, Ohio, at premium of \$161.50 prior to election to be held Nov. 8.

La., Westwego—Paving—City, Vic. A. Pitre, Mayor, sold \$200,000 4¾% bonds to Caldwell & Co., Nashville, Tenn., at \$4300 premium. 10-20

Miss., Jackson—Municipal Improvement—City, Walter A. Scott, Mayor, sold \$210,000, 4½% bonds to National City Co., New York, Capital National Bank and Mississippi Bond & Securities Co., Jackson, at par, premium of \$1,500. 10-20

N. C., Hendersonville—Road—Henderson County Comms. sold \$281,000, 4¾% bonds to Prudden & Co., Toledo, Ohio, at premium of \$2,915. 10-20

N. C., Lumberton—Drainage—Robeson County Comms. sold \$90,000, 6% Drainage Dist. No. 2 bonds to Prudden & Co., Toledo, Ohio, at par. 10-6

S. C., Spartanburg—Highway—Spartanburg County Highway Comm., B. W. Johnson, Chmn., sold \$454,000 4½% \$1000 denom. bonds to Mississippi Valley Trust Co., St. Louis, Mo., Wells, Dickey Co., Chicago, Ill., and Kauffman, Smith & Co., St. Louis, at \$458,721.60 and accrued interest. 10-27

Tenn., Johnson City—Improvement—City sold \$111,400 5½% bonds to Well, Roth & Irving Co., Cincinnati, Ohio. 10-20

Tenn., Knoxville—Improvement—City sold \$169,000 5½% bonds to E. H. Rollins & Sons, New York, at 101.20.

Tenn., North Chattanooga—W. S. Beck, Mayor, wires: "Little, Wooten & Co., Jackson, Tenn., purchased \$66,000 bonds at \$1,025 premium, 6% annual interest, bonds due 1, 2, 3, 4 and 5 years, \$1,000 each."

Tex., Anson—Road—Jones County, Owen Thomas, County Judge, sold \$273,000 Dist. No. 1 bonds to Braun, Bosworth & Co., Toledo, Ohio. 10-20

Tex., Clinton—School—Board of Trustees, Clinton Common School Dist., sold \$100,000 5½% bonds to Kauffman, Smith & Co., St. Louis, at premium of \$8300. 10-20

Tex., Greenville—School—Hunt County Comms. sold \$400,000 bonds to Greenville Natl. Bank at premium of \$139; \$209,000 4 1/3%; \$191,000 4½%. 10-20

Tex., Lefors—Road—Gray County Comms. Court sold \$400,000 5½% Road Dist. No. 2 bonds to Brown-Crummer Co., Wichita, Kansas, at premium of \$21,000. 9-29

Tex., Rio Hondo—Water Works—Cameron County purchased \$15,000 bonds. 9-15

Va., Clarendon—Fire Hydrants—Arlington County Board of Suprvs. sold \$50,000, 5% notes to Braun, Bosworth Co., Detroit, Mich., at 102.23.

Building and Loan Associations

Okl., Oklahoma City—Oklahoma Loan Co., capital \$10,000, chartered; V. L. Raspberry, T. J. Cleveland, Continental Bldg.

Tenn., Knoxville—East Tennessee Building and Loan Assn., capital \$100,000, chartered; W. H. Picklesimer, Pres.; W. H. McCroskey, Treas.; A. M. Hill, Sec., Island Home Park.

New Financial Corporations

Ala., Birmingham—Central Investment Co., capital \$135,000, incorporated; John H. Frye, Pres., Roebuck Springs; John G. Farley, V.-P.; B. F. Blankenship, Sec.

Ala., Birmingham—Pine Ridge Investment Co., capital \$20,000, incorporated; Mark Hodo, Pres., 1313 S. 31st St.; G. C. Phillips, V.-P.; W. H. Hicks, Sec.

Ala., Birmingham—National Mortgage Bond Co., capital \$25,000, incorporated; G. B. Hollingsworth, Pres.; W. T. Latham, V.-P., 1300 S. 21st St.; R. L. Boatrite, Sec., 3435 Seventeenth St.

Ala., Birmingham—Club Manor Investment Co., capital \$125,000, incorporated; C. R. Byrd, Pres., 3214 Cliff Rd.; J. C. Taylor, V.-P.; Edgar Collins, Sec.

Ga., Elberton—Granite City Bank of Elberton, capital \$50,000, chartered; W. O. Jones, F. S. Fortson, Samuel Platt.

Ga., Savannah—Financial Service Corp., incorporated; W. D. Jones, 413 Henry St.; Charles D. Russell, Realty Bldg.; D. D. Pounder.

Md., Baltimore—Investment Trust Corporation of Maryland, chartered with authorized capital of 150,000 shares; 50,000 shares of par value of \$100 each, preferred stock; 75,000 shares of par value of \$50 each, Class A, common stock; 25,000 shares, Class B, common stock, without nominal or par value; Howard W. Jackson, Pres.; R. Walter Graham, V.-P.; Howard Tebbis, Sec.

Mo., Kansas City—Sons Investment Co., capital \$30,000, incorporated; H. L. Dierks, 700 Gates Bldg.; C. E. Combs, H. W. Field.

Mo., Kansas City—First National Securities Co., incorporated; J. N. and E. H. Greene, H. P. Redpath.

Mo., St. Louis—Duncan-Garrison Investment Co., capital \$50,000, incorporated; Robert A. Burns, Lester Bldg.; Wade H. Bush, 4 Amherst St.; Thomas G. Mullally.

N. C., High Point—Glove Industrial Bank, capital \$100,000, incorporated; W. A. Davis.

Tex., Dallas—Mumpower Investment Co., capital \$10,000, incorporated; E. V. and Ola M. Mumpower, 2500 Maple St.; Nelson A. Farry.

Tex., Lorraine—First National Bank of Lorraine, organized; Judge J. A. Hall, Pres.; G. A. Hutchins, V.-P.; R. E. Bennett.

Houston National Bank, C. S. E. Holland, Pres., Houston, Tex., plans increasing capital \$800,000 to \$1,000,000.

Merchants & Planters Bank, J. C. Brooks, Pres., O. S. Tyus, Cashier, and City National Bank, J. W. Hammond, Pres., C. E. Gunnells, Cashier, both Griffin, Ga., plan merging as First National Bank, capital \$200,000; G. J. Drake, Pres.; C. E. Gunnells, Cashier.

Century Trust Co., Douglas Thomas, Pres., Baltimore and St. Paul St., Baltimore, Md., has acquired Security Storage & Trust Co.,

C. J. Hamilton, V.-P., North Ave., near Charles St., and will operate banking and trust departments of business as branch of Century Trust Co.

National Saving, Building & Loan Assn., Kansas City, Mo., plans increasing capital, \$1,000,000 to \$2,000,000.

Rapides Investment Co., Alexandria, La., increased capital, \$40,000 to \$100,000.

United States Bond & Mortgage Co., New York, has established branch office at 1013 Court Square Bldg., Baltimore, Md.; J. M. Hodgskin, Mgr.

York Manufacturing Company Sales and Installations.

The York Manufacturing Company, York, Pa., reports for the period from September 30 to October 31 a total of 123 sales and installations of its ice-making and refrigerating machinery throughout the country, including 33 at different points in the South, as follows: Washington, D. C.; Jacksonville and Tampa, Fla.; Atlanta and Augusta, Ga.; Louisville, Ky.; Hammond, Harvey, New Orleans and Slidell, La.; Baltimore, Bridewell, Pocomoke City and Sparrows Point, Md.; Kansas City, Mo.; Oklahoma City, Guthrie and Wewoka, Okla.; Georgetown, S. C.; Knoxville and Memphis, Tenn.; Fredericksburg and Lynchburg, Va., and South Charleston, W. Va. At several cities two or more sales and installations were made.

Credit Bureau Management. By J. R. Truesdale. New York: Prentice-Hall, Inc. 1927. Cloth. Gilt. Pp. 297. \$5.

A great need of business today is not less credit, for credit is a business accelerant, but for more intelligent credit. To meet this demand, to attain greater efficiency in credit bureau administration and to assist unorganized cities in starting credit bureaus, explains the existence of Mr. Truesdale's fine work in this book. The publishers say that it presents for the first time tested methods which credit bureaus have found practical in perfecting the services rendered to sustaining members. Here are to be found the practical plans in use today by "going bureaus." The book gives a valuable, detailed discussion covering the operation of bureaus, including sales and promotion. It shows how services can be sold through planned sales effort, through the assistance of members and by the use of printed material. Underlying principles are carefully analyzed and explained throughout. A complete set of credit forms and many illustrations are included. The book enables one to refer readily to any credit bureau problem in which one is interested and does it quickly.

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This year's BLUE BOOK OF SOUTHERN PROGRESS has met with an unusual degree of appreciation and we have received hundreds of letters commending the Blue Book to the widest possible reading on account of its value to the South and the whole country.

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Manufacturers Record **Baltimore, Md.**



PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close November 16, 1927.

UNITED STATES ENGINEER OFFICE, Florence, Ala. Sealed bids will be received at this office until 11 o'clock A. M. November 16, 1927, and then publicly opened, for sale of locomotives, cars, steam shovels and one locomotive crane at Wilson Dam, Tennessee River. Further information on application.

Bids close November 28, 1927

TREASURY DEPARTMENT, Bureau of Engraving and Printing, Washington, D. C., November 7, 1927.—Sealed proposals are invited for the purchase of pulp during the last six months of the fiscal year beginning July 1, 1927. Proposals to be received not later than 2 P. M. Monday, November 28, 1927. Blank forms, with specifications for proposals and further information, will be furnished on application to A. W. HALL, Director.

Bids close December 1, 1927.

Office of Public Buildings and Public Parks of the National Capital, Navy Building, Washington, D. C. Sealed bids will be received at this office until 11 A. M. (Standard Time), December 1, 1927, and then publicly opened in Room 1613 Navy Building, for the erection in Washington, D. C., of a Building to Commemorate the Services and Sacrifices of the Women of the United States of America, its Insular Possessions and the District of Columbia in the World War. Further information upon application.

Bids close November 17, 1927.

\$1,000,000 Coastal Highway Bonds

OF THE COUNTIES OF DILLON, FLORENCE, WILLIAMSBURG, COLLETON, BEAUFORT AND JASPER, SOUTH CAROLINA
(JOINT COUNTY OBLIGATIONS)

Columbia, S. C.

SEALED BIDS, addressed to the undersigned, will be received by the Board of Coastal Highway Commissioners at the office of the State Treasurer of South Carolina, in Columbia, S. C., until Thursday, NOVEMBER 17, 1927,

at 1.30 o'clock P. M., for the purchase of \$1,000,000 Coastal Highway bonds of the Counties of Dillon, Florence, Williamsburg, Colleton, Beaufort and Jasper, maturing: \$111,000 of bonds on February 1 in each of the years 1931 to 1938, inclusive, and \$112,000 of bonds on February 1, 1939. Bonds dated November 1, 1927. Interest rate four and one-half percentum (4½%) per annum, payable semi-annually, February 1 and August 1. Coupon bonds, registerable as to principal only, payable in New York in gold. Denomination \$1000. General joint obligations of the six counties, issued under Act No. 736 of the Acts of 1926. The payment of these bonds is secured not only by a sufficient levy on all taxable property in the six counties (the primary fund for payment), but also by a so-called Reimbursement Agreement between the counties and the State Highway Commission of South Carolina, the bonds being issued for the construction of State highways.

Purchasers will be furnished with approving opinion of Messrs. Reed, Dougherty, Hoyt & Washburn of New York.

A certified check, payable to the order of the Board of Coastal Highway Commissioners, or cash for 2% of the face amount of bonds bid for must accompany bid.

The right is reserved to reject any and all bids.

Dated October 31, 1927.

WADE STACKHOUSE,
Chairman, Board of Coastal
Highway Commissioners.
E. T. H. SHAFFER,
Secretary, Board of Coastal
Highway Commissioners.

RATE: 35 cents per line per insertion.

PUBLICATION DAY: Thursday.

FORMS CLOSE: 4 P. M. Monday.

DAY LETTER: When too late to send copy by mail to reach us by 4 P. M. Monday, forward by day letter.

THE DAILY BULLETIN OF THE

MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—35 cents per line per insertion.

\$50,000 6% Paving Certificates

For Sale—50,000 dollars' worth paving certificates running nine years, 6 per cent interest, issues by City of Bastrop, La.

THIBODEAUX & HARRISON, INC.,
Baton Rouge, La.

Bids close November 15, 1927.

Road Improvements

MATAGORDA COUNTY PROJECT

No. 1A

Bay City, Texas.

Sealed proposals addressed to the Commissioners' Court of Matagorda County for the furnishing of all necessary material, labor and costs for the construction of road improvements as listed below will be received by the said Commissioners' Court at Bay City, Texas, until 10 o'clock A. M. on Tuesday, November 15, 1927, and then publicly opened and read.

DESCRIPTION OF PROPOSED IMPROVEMENTS:

County Highway from near Rugeley to near Cedar Lane—Length, 4.621 miles; type, 9-ft. concrete pavement. Bates section—9-in., 6-in., 9-in., reinforced with 40-lb. wire mesh and five-eighths edge bars, sand cushion on portion.

| Item | Approx. Quantities | Items |
|------|--------------------|---|
| 12 | 1,800 |Common Roadway Excavation. |
| 14 | 50 Cu. Yds. | Excavation for Structures. |
| 21 | 244 Stations. | Preparing sub-grade. |
| 32 | 1,700 Cu. Yds. | Local Sand Sub-grade Treatment hauled first quarter mile. |
| 32 | 14,000 Cu. Yds. | Same; add ¼ mile. |
| 69 | 24,000 Sq. Yds. | Concrete Pavement in place. |
| 70 | 88,000 Lbs. |40-lb. Wire Mesh Reinforcement in place. |
| 70 | 5,100 Lbs. |Five-eighths Reinforcing bar in place. |
| 85 | 45 Cu. Yds. | Class "A" Concrete for culverts in place. |
| 86 | 5,500 Lbs. |Reinforcing Steel for culverts in place. |

Detailed plans and specifications of the work may be seen for examination, and information may be obtained at the offices of E. N. Gustafson, County Engineer, Bay City, Texas.

A certified check for five per cent of the total amount bid, made payable to the order of A. Harris, County Judge of Matagorda County, must accompany each proposal as a guarantee that the bidder if successful, will enter into contract and make bond in accordance with requirements of the specifications.

The right is reserved by the Commissioners' Court to reject any and all proposals or to waive all technicalities.

Proposals shall be submitted in sealed envelopes and marked "Bid for Construction of County Highway."

Bids close December 8, 1927.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., October 28, 1927.—SEALED BIDS in duplicate will be received until 3 P. M. December 8, 1927, and then publicly opened, for the construction of the United States Postoffice and Courthouse at Williamson, W. Va. Drawings and specifications may be obtained from the custodian of the site at Williamson, W. Va., or at this office, at the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close November 21, 1927.

Removal of Drawbridge

Fernandina, Fla.

Sealed proposals will be received by the Board of County Commissioners of Nassau County at the office of G. C. Burgess, Clerk of the Circuit Court of Nassau County, Fernandina, Florida, until 10 o'clock A. M. on Monday, the 21st day of November, A. D. 1927, for the removal of one steel-plate girder drawbridge of a length of approximately 148 feet, width 15 feet, to include two 60-foot horizontal clear openings, with a concrete pivot pier and timber trestle bent approaches and draw-pier fenders, guards and piling, located over Kingsley Creek, about three miles southwest of the City of Fernandina, Florida.

Said structure and material to be removed and the channel of Kingsley Creek cleared to the complete satisfaction of the District Engineer of the War Department at Savannah, Ga. The steel drawbridge and appurtenances to remain the property of the contractor, and its salvage value to be applied as part payment for the removal of said structure and material.

Information and proposals may be obtained from D. H. Ground, Chairman of the Board of County Commissioners of Nassau County, Fernandina, Florida.

A bond for the sum of One Thousand Dollars will be required for the faithful performance of the contract.

The right is reserved to reject any or all bids or any portion thereof.

D. H. GROUND,

Chairman of the Board of
County Commissioners.

N. A. HOTARD, Engineer,
New Smyrna, Fla.

Attest:
G. C. BURGESS, Clerk.

Bids close November 29, 1927.

Street Improvements

Dawson, Ga.

Sealed proposals on blank forms furnished by the city and addressed to the "MAYOR AND COUNCIL, DAWSON, GEORGIA," will be received until 2 P. M. November 29, 1927, at Dawson, Georgia, for furnishing all material, equipment and labor for doing the following work:

Approximately 35,000 sq. yds. of street paving, together with all drainage, curb, curb and gutter and other incidentals connected therewith.

Each bid must be accompanied by a certified check (not bidder's bond), made payable to the City Clerk, for not less than five thousand (\$5000) dollars.

Plans and specifications may be seen at the office of the City Clerk or at the offices of the Engineers, and specifications may be obtained from the Engineers upon payment of \$2.00 to cover the cost of reproduction. Full sets of plans may be obtained from the Engineers upon payment of \$10 to cover cost of printing and handling.

The right is reserved to reject any or all bids.

R. R. MARLIN, Mayor.

R. R. JONES, City Clerk.

H. S. JAUDON ENGINEERING CO.,
Engineers,
Elberton, Georgia.

Bids close December 15, 1927.

Dredging and Rock Removal at St. Lucie Inlet, Florida

Stuart, Fla.

Office of Board of Commissioners of Martin-St. Lucie Counties Improvement District, in Martin and St. Lucie Counties, Florida, Stuart, Florida.

Sealed bids will be received here until 2 P. M. December 15, 1927, and then publicly opened, for dredging and rock removal at St. Lucie Inlet, Florida. Further information on application to this office or to the office of Gilbert A. Youngberg, Chief Engineer, 21 Laura street, Jacksonville, Florida. Specifications and drawings upon request and deposit of \$10.

Bids close November 30, 1927.

Notice to Bidders

Dover, Del.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until 2.30 o'clock P. M. November 30, 1927, and at that place and time publicly opened, for contracts involving the following approximate quantities:

CONTRACT 88
STATE WHARF AT LITTLE CREEK
70 Lin. Ft. Timber Bulkhead.
1 10-foot Span Timber Bridge.

CONTRACT 97
CORBIT-BEAR, 2.834 MILES
¾ Acres Clearing.
¾ Acres Grubbing.
16,000 Cu. Yds. Excavation.
1,600 Cu. Yds. Borrow.
150 Tons Broken Stone Base Course.
5,000 Cu. Yds. Cement Concrete Pavement.
15,200 Lin. Ft. Longitudinal Metal Joint.
OR 15,200 Lin. Ft. Longitudinal Joint (Non-Metallic).
325 Cu. Yds. Class "A" Concrete.
15,000 Lbs. Reinforcement.
320 Lin. Ft. 15-in. Corrugated Metal Pipe.
180 Lin. Ft. 18-in. Corrugated Metal Pipe.
140 Lin. Ft. 15-in. R. C. Pipe.
180 Lin. Ft. 18-in. R. C. Pipe.
34 Lin. Ft. 24-in. R. C. Pipe.
48 Lin. Ft. 36-in. R. C. Pipe.
80 Lin. Ft. Relaid Pipe.
400 Lin. Ft. 4-in. Pipe Underdrain.
800 Sq. Yds. Class "A" Concrete Gutter.
400 Lin. Ft. Wire Cable Guard Rail.
1,800 Lin. Ft. Wood Shoulder Curb.

CONTRACT 98
Grading and Surfacing Earth Road
1.00 Mile

CONTRACT 99
State Highway Police Station, State Road

CONTRACT L
Six 2½-ton Motor Trucks.
These trucks to have four-wheel drive.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check or money to the amount of at least ten (10%) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Complete sets of plans and specifications may be obtained upon receipt of two dollars (\$2.00) for each contract, which amount will not be refunded.

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

Bids close December 1, 1927.

Municipal Dock

Punta Gorda, Fla., November 1, 1927.

Sealed proposals will be received at the City Hall at Punta Gorda, Fla., up to two (2) o'clock P. M. on the first (1st) day of December, 1927, for the furnishing of all labor and material and for the construction of a Municipal Dock, Channel and Turning Basins. Bids shall be made on the basis of the successful bidder accepting Ten (10) Year, Seven (7%) Per Cent Time Warrants at Par Value in payment for the work done.

The principal quantities involved are approximately as follows:

26,000 cu. yds. Dredged Excavation (Spoiled).
47,000 cu. yds. Dredged Embankment Fill.
910 lin. ft. Steel Sheet Piling Bulkhead.
94 cu. yds. Reinforced Concrete.
20,000 ft. B. M. Bulkhead Timber in Place.
5,700 sq. yds. Pavement.

All bids will be compared on the basis of the Engineer's estimate of the quantity of work to be done.

A certified check on a bank satisfactory to the city officials in the sum of 5% of the amount bid, and made payable to the City of Punta Gorda, Fla., must accompany each proposal.

Plans and specifications are on file and may be examined at the office of the City Manager, and may be secured upon application and the payment of the sum of Ten Dollars (\$10).

The city reserves the right to reject any or all bids and award the contract in part to one or more bidders as considered to their best interests.

CITY OF PUNTA GORDA, FLORIDA.

D. F. SMOAK, Mayor-Commissioner.
C. K. DODD, City Manager.

Bids close November 16, 1927.

Outfall Sewer and Sewage Disposal Plant

Durham, N. C.

Sealed Proposals will be received by the City Manager of the City of Durham, N. C., in the Council Chamber of the City Hall until 11 o'clock A. M. on Wednesday, the sixteenth day of November, 1927, for the construction of Sanitary Sewers and Sewage Disposal Plant to serve the territory tributary to New Hope Creek.

The work will embrace furnishing approximately five and one-half (5½) miles of Vitrified Terra Cotta Sewer Pipe from 10 inches to 18 inches in diameter, approximately two hundred and forty (240) tons of cast-iron pipe and fittings, thirty (30) tons of reinforcing steel and other miscellaneous material.

The work will also embrace the construction of an Outfall Sewer with the above materials.

The work will further embrace the construction of an Imhoff Tank, together with Sludge Drying Beds and other appurtenances.

Plans and specifications are on file with the City Clerk and blank forms of Proposal, Specifications, etc., may be obtained from the Engineer without charge.

Those desiring a full set of plans may obtain them from the City Purchasing Agent upon the payment of five (\$5.00) dollars, which will be returned to those who submit bona fide bids on the work. Single prints may be obtained for one (\$1.00) dollar each.

Consideration will be given only to bids of contractors who submit evidence showing that they are licensed under "An Act to Regulate the Practice of General Contracting," ratified by the General Assembly of North Carolina on March 10, 1925.

Certified check for five (5%) per cent of the amount bid for such items for which a proposal is made must accompany all proposals.

Bids will be opened in the presence of those interested, but the Council reserves the right to reject any or all bids.

By order of Council.

R. W. RIGSBY, City Manager.
C. B. ALSTON, City Clerk.
WILLIAM M. PIATT, Engineer,
Durham, N. C.

Bids close November 14, 1927.

Notice to Contractors and Cast Iron Pipe Foundries

Melbourne, Fla., October 12, 1927.

Sealed bids will be received by the City Commission of the City of Melbourne, Fla., up until 2 P. M. Monday, November 14, 1927, for furnishing labor and material or either for the construction of the herein-named improvements, to wit:

82,000 lineal feet six (6) inch to twelve (12) inch C. I. P. Cl. "B" or equivalent.
120 Steamer Hydrants.
96 Gate Valves six (6) inch to twelve (12) inch.

Alternate bids will be received on Class No. 100 and No. 175 of Universal Pipe, McWane precast joint C. I. P. and De Lavaud Centrifugally Cast C. I. P. Class 150 and 250.

Bids will be received for:

(1) All cast-iron pipe, valves and specials to be furnished direct to the city F.O.B. cars Melbourne.

(2) Labor and supervision for construction in which the city furnishes the pipe, valves and specials.

(3) Complete installation in which the contractor furnishes all labor and material.

Bids must be accompanied by a certified check or a bidder's bond in the amount of at least five per cent of the amount bid, made payable to the City Clerk of Melbourne, Florida, and contract bond for 50% of the amount of the contract will be required.

Plans, specifications and blank proposals may be obtained at the office of the City Clerk upon payment of deposit of \$10 on each set, to be refunded upon return of said plans and specifications.

Bidders are advised to bring with them or send credentials establishing themselves as successful contractors and give full information concerning their financial responsibility.

The City Commission reserves the right to reject any or all bids and to award the contract in the best interests of the City of Melbourne, Florida.

W. K. SEITZ, City Manager.
A. W. HOWARD, City Engineer.
C. E. SHULL, City Clerk.

Bids close November 15, 1927.

Municipal Pier Building

Bradenton, Fla.

Sealed Proposals addressed to City Council, Bradenton, Florida, will be received until 1.30 P. M. November 15, 1927, for construction of Municipal Pier Building. Plans and Specifications on file at office of Commissioner Public Works and may be secured on deposit of \$10.

Right reserved to reject any and all bids.

CITY OF BRADENTON, FLORIDA.

R. K. VAN CAMP,
Commissioner Public Works.
E. W. DARLING, Jr.,
Architect.

Bids close November 22, 1927.

Pipe Line

Hagerstown, Md., November 7, 1927.

SEALED BIDS, in duplicate, will be received by the Mayor and Council of the City of Hagerstown, Maryland, through the Board of Water Commissioners, at their office in City Hall until 10 o'clock A. M., Eastern Standard Time, Tuesday, November 22, 1927, for Contract No. 5, Potomac River Project, for laying pipe line from Potomac River Filtration Plant to the City of Hagerstown, involving laying 31,433 feet of 24-inch cast-iron pipe line and appurtenances and creek crossing, 269 feet in length, of two lines of 24-inch pipe and appurtenances.

Specifications and plans can be obtained at the office of the Board at the above address by prospective bidders. A cash deposit of \$25 will be required for sets of plans and specifications, which will be refunded upon return in good condition of the sets furnished.

A certified check in the sum of \$10,000 will be required with each bid.

Bids will be publicly opened and read at the time above given.

The Board reserves the right to reject any or all bids.

WILLIAM P. LANE,
President, Board of Water Commissioners.
ALBERT HEARD,
Secretary, Board of Water Commissioners.



CLASSIFIED OPPORTUNITIES



MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

WATER POWER Site For Sale—On Rocky River, 20 miles east of Charlotte, N. C., and four miles of Norfolk-Southern Ry. Potential development of 7500 h.p. at minimum cost, where land is cheap and in the midst of textile territory of the South. Eugene Ashcraft, Monroe, N. C.

LIMESTONE DEPOSITS

FOR SALE—Limestone Deposits, unlimited supply, near Hawkinsville, Ga.
ROBT. S. ANDERSON,
Hawkinsville, Ga.

SLATE QUARRY

FOR SALE OR LEASE—Developed quarry for commercial slate, shale and aggregate. Excellent railroad facilities.
"OWNER,"
1521, Peachtree Street, Atlanta, Ga.

GYPSUM MINE

FOR SALE—Gypsum mine near Havana, Cuba. Finest quality, reasonable price; also small and large tracts of land near Havana suitable for subdivision purposes or trucking.
BEERS & COMPANY, Realtors,
Havana, Cuba.

GAS PROPERTIES WANTED

INFORMATION DESIRED regarding gas properties which can be purchased and which have possibilities for interconnection with other properties. Address No. 6821, care of Manufacturers Record, Baltimore, Md.

GOLD MINING PROPERTY

GOLD MINING PROPERTY FOR SALE.
678 Acres in Spottsylvania County, Virginia. Many nuggets have been found on this property from time to time, the heaviest of which was found recently and is now in the possession of the owner. This is a very beautiful nugget of pure gold, weighing twenty-four pennyweights. The property is located about a mile and a half from the famous "White Hall" Gold Mine, which has a Philadelphia Mint record of \$1,800,000. Would sell as a whole or take an interest with a responsible promoting company having sufficient capital to carry through a live proposition. For full particulars address G. Z. FAULCONER, Lexington, Kentucky.

TIMBER AND TIMBER LAND

SNAP—5000 acres, 7 million ft. timber, Pamlico Sound, \$45,000; fine game preserve, 8000 acres, 15 million ft. timber, \$125,000. Very attractive. W. T. Bailey, Suffolk, Va.

GREAT BARGAINS in Timber Lands. Many large tracts of timber lands for sale, from white oak to mahogany and all between. If you mean business write me.
A. J. NOBLETT Green Cove Springs, Fla.

TIMBER OPERATION

REAL BARGAIN CAN BE HAD IN THIS 40 to 50 Million feet Pine and Cypress Timber. New Band Mill, Tram and Locomotives and all other Equipment required to operate Sawmill. Plant is less than year old and can be sawing lumber in five days. For sale at Half Price to close partnership. **OTHER TIMBER TRACTS AND LARGE TRACTS OF CUTOVER SOUTHERN LANDS.**

F. L. GIBSON,
Thomasville, Georgia.

FLORIDA LAND WANTED

FLORIDA LAND WANTED.

Will purchase for colonization purposes one hundred thousand acres of good, cheap farm land. P. O. BOX 3, TRENTON, N. J.

FARM, FRUIT AND TRUCK LANDS

FLORIDA

"FLORIDA BOUND."

If you enjoy Life, you'll Love FLORIDA; "everybody" is going to FLORIDA this season—some for its Superb Climate, others to make safe and solid investments now, while it's still "bargain time," and return later to live; others to buy an inexpensive little home, Poultry Ranch, Truck Farm or Grove and "take life easy." We can "fit you up." Send today for booklet and list. **TAMPA-WEST COAST REALTY CO. (INC.)**, Realtors, Opp. P. O. "Since Before the War," Tampa, Florida.

FLORIDA LANDS OFFER WONDERFUL OPPORTUNITIES, AGRICULTURALLY AND HORTI- CULTURALLY

The phenomenal activity in Florida of 1924 and 1925, after running its course, was followed by an interval of depression. But the new, permanent forward movement, not a boom, has now started. This movement is based on Florida's evolution agriculturally and horticulturally. Unbounded wealth and fertility are in Florida's soil. The State needs men with energy and capital to develop her fertile lands for necessary production. The following large tracts, purchased now at price bottoms never to be reached again, will prove of special interest to the investor:

2340 acres perfectly drained rich truck and farming land on Polk and Hillsborough County lines, near two railroads, good towns and roads. Price \$30 per acre.

8000 acres drained land adjoining above tract, same quality rich soil, located near the city of Lakeland. Price ranging between \$35 and \$60 per acre.

5760 acres genuine Norfolk citrus land, high elevation, located in Hernando County near Brooksville. About 2000 acres cleared and ready to plant to trees, including 300 acres in four-year-old citrus trees; balance cutover citrus land, underlaid with clay and limestone. Railroad and station on tract, good roads, buildings, houses, deep well. Ideal for large grapefruit development. Price from \$50, \$100 to \$150 per acre.

23,000 acres first-class truck, farming and citrus land, located in Lake County. Railroad running through tract, near paved roads. Some fine timber, mineral clays, limestone, etc. Price \$17.50 per acre.

27,000 acres located in Hardee and Manatee Counties adjoining Polk and Hillsborough. First-class truck, farming and citrus land. Railroad, paved roads through property and near good towns. Will sell 7000 acres or 20,000, if desired. Price \$12.50 per acre.

For full description and best terms to financially able parties write or wire
E. J. KAUFMANN, Box 15, Lakeland, Fla.

LOUISIANA PECAN ORCHARD

610 acres, Louisiana alluvial farm, 3500 paper-shell pecan trees 14 to 18 years old, good residence and improvements; a safe, permanent investment. Price \$150,000.

W. A. STEPHENS, Realtor.
P. O. Box 555, Shreveport, Louisiana.

NORTH CAROLINA

If interested
FOR HOME OR FOR INVESTMENT
In the great and rapidly developing
STATE OF NORTH CAROLINA,
especially in its leading city, Charlotte, or in a Southern Cotton Mill or Southern Mill Stocks, write to

F. C. ABBOTT & CO.,
Realtors and Investment Bankers
Nearly thirty years in Charlotte.

FARM, FRUIT AND TRUCK LANDS

TEXAS

"TEXAS 'WINTER GARDEN' LANDS."

A subdivision in 20-40 acre tracts, cleared and irrigated; suitable for Citrus Fruits, Winter Vegetables, Staple Crops. Reasonable prices. **INVESTIGATE** our proposition TODAY.

BERMUDA LANDS COMPANY, Realtors,
501-4 Houston Building,
San Antonio, Texas.

BUSINESS OPPORTUNITIES

BUSINESS with bright future needs some one to finance it; product for farmers; unlimited market; cannot supply the demand. For particulars Address No. 6819, care of Manufacturers Record, Baltimore, Md.

FINANCIAL ASSISTANCE WANTED.

Reliable party wanted who will assume all expenses incident to obtaining patent rights and copyrights and accept stock in sales corporation to be organized in return for outlay. No activity necessary. No risk, as full protection will be granted. Address No. 6817, care of Manufacturers Record.

FOR SALE—Contingent manufacturing rights on a thin-shell, hollow-cement tile made by pouring (casting) cement, etc., into heated patented machines. The U. S. Government purchased machines and manufactured over 1,000,000 tile for its own use in Panama. Unlimited market all over country. Cost of 8x12x12 four-cell tile, 1-inch shell, will not exceed 8 1/2 cents. Machine and product manufacturing rights will be given in limited territories. For further information regarding territories open, etc., address **ALBERT PAULY**, 1331 K street N. W., Washington, D. C.

TRANSLATIONS

TRANSLATIONS

K. METZLER,
4408 Bellevue Avenue,
Baltimore, Md.
Foreign translations in all lines desired.
Specializing in Spanish, French,
German, Italian.
Letters translated day of receipt.

INDUSTRIES WANTED

WINCHESTER, VIRGINIA, wants factories. Plenty reasonable labor and city will give many concessions. Ideal climate and railroad facilities. Address City Manager.

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Territories for sale of steel windows open in many parts of the United States. Write us for particulars. **ALLISON STEEL PRODUCTS COMPANY**, Chester, Pa.

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SEND US INQUIRIES for Steam Kiln Dried Soft Yellow Pine Finishing, rough and dressed; Shed Stocks, Casings, Base and Mouldings. Mixed cars a specialty. **Cochran Lumber Company**, Cochran, Georgia.

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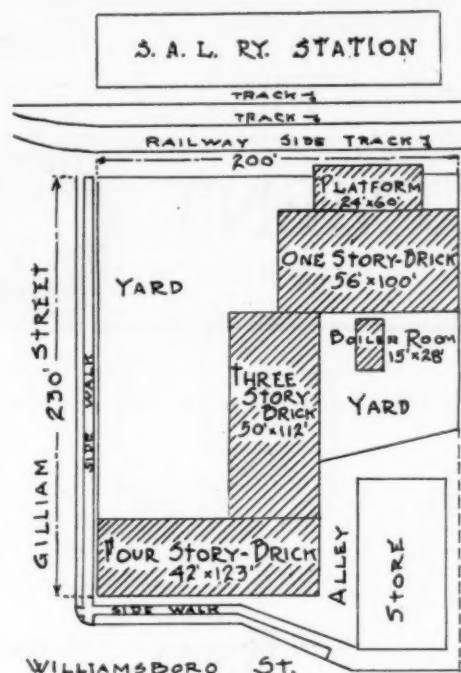
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Hydro-electric power from Carolina Power & Light Company available—ready for immediate occupancy. Present buildings suitable for woodworking plant, or manufacture of narrow fabrics, hosiery or silk.

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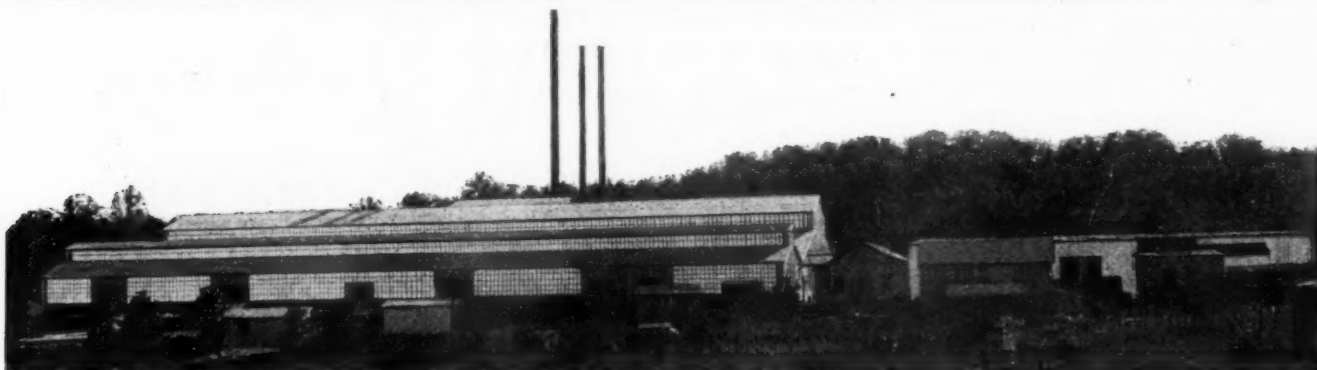
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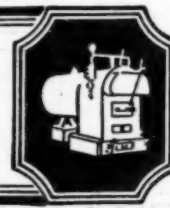
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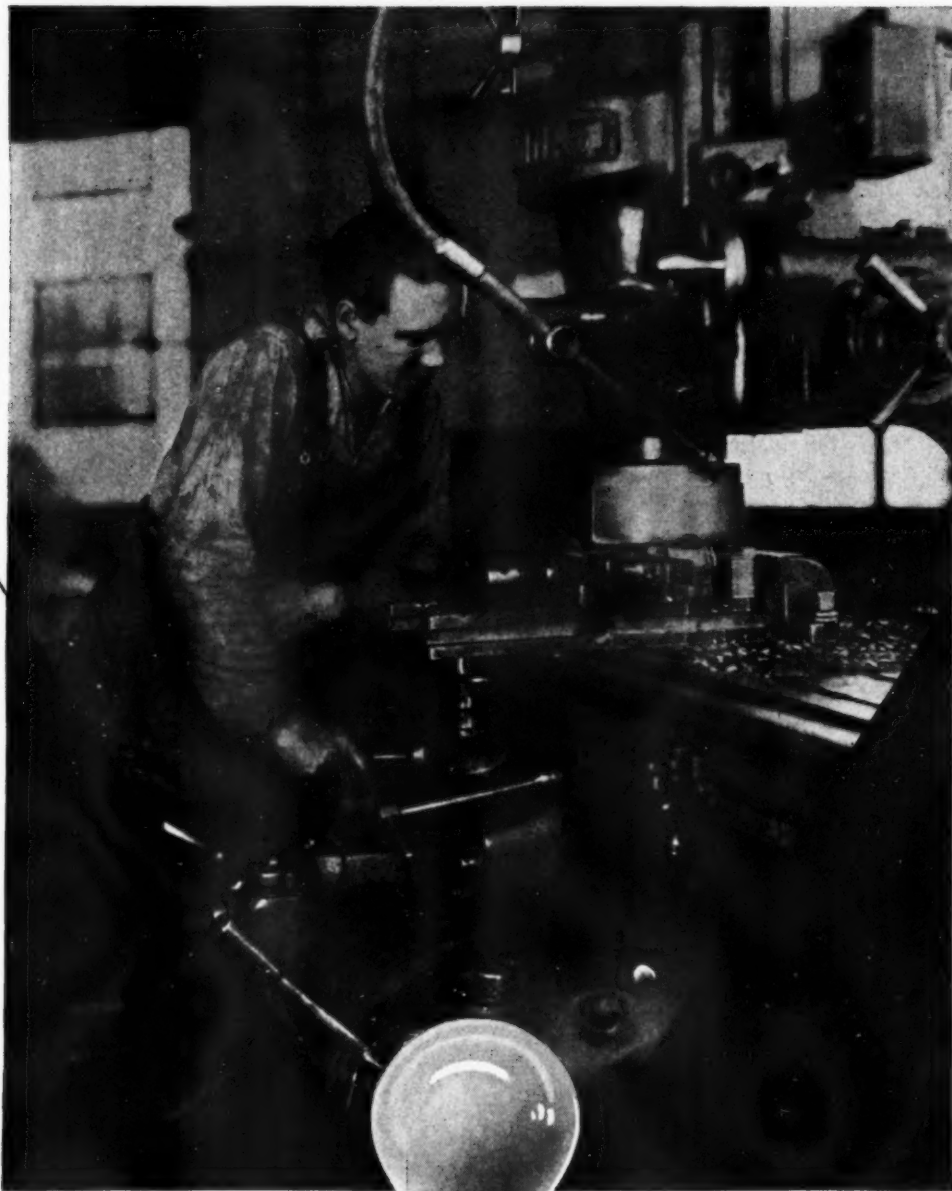
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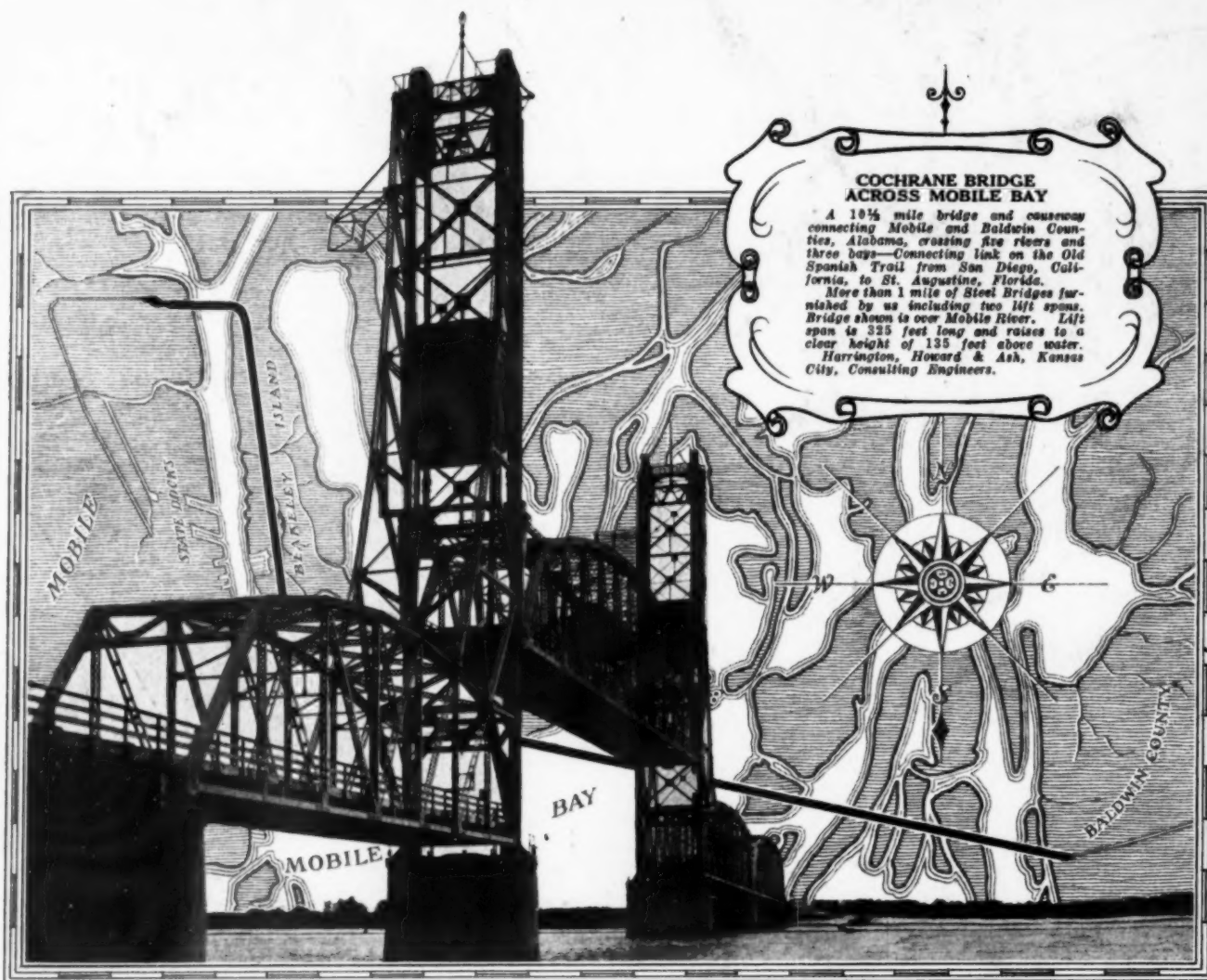


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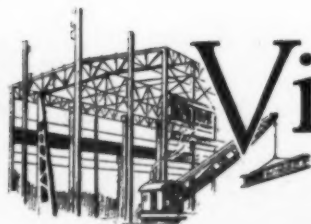
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